TrackIt Application
IEEE Application Requirements Specification Document

Student Name: Olaoluwa Esho

Student Number: x13321381

Student Email: x13321381@student.ncirl.ie

Course Name: BSc (Hons) in Technology Management

Course Specialisation: Business Analyst

Project Supervisor: Joe Molumby
Declaration Cover Sheet for BSHTM4 Project Submission

SECTION 1 Student to complete

<table>
<thead>
<tr>
<th>Name:</th>
<th>Olaoluwa Esho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student ID:</td>
<td>X13321381</td>
</tr>
<tr>
<td>Supervisor:</td>
<td>Joe Molumby</td>
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1. Executive Summary

For this project, I had to undergo numerous elicitation and analysis techniques taken from the Business Analysis Body of Knowledge (BABOK) in order to help me plan and put together a detailed requirements specification document for this app. The techniques I used to gather information for this project are surveys, a brainstorming session, interviews, prototypes, a requirements workshop, and interface analysis. At the beginning of this project I was having a bit of trouble recognising the stakeholders in the project. The reason for this was because I had to change so many things regarding the project frequently, but then I met with my supervisor and I finally had a clear understanding of who the stakeholders involved in the project were. After this, I put together a list of stakeholders that I thought will be involved in this project.

When I had finished doing this, I then went on to determine the importance of each stakeholder according to their influence. I achieved this by using a detailed stakeholder matrix. I then began to perform each of the requirements elicitation and analysis planning after most of the key stakeholders were identified. When this phase came to an end and I had received feedback from a few stakeholders that I had contacted to participate in the elicitation sessions, I then began to implement each elicitation technique with a few stakeholders involved. During these elicitation sessions I had with stakeholders, I always took detailed notes either on an electronic device (phone, laptop, iPad) or just on a piece of paper. The results of these elicitation sessions were documented and then I used various analysis tools to analyse them. The requirements elicitation results were utilised to formulate a detailed IEEE requirements specification document for this app. This document discusses the key functional and non-functional requirements of the app in great detail. A development team should utilise this IEEE document as well as all the various elicitation results to design this app.
2. Requirements Elicitation & Analysis Planning

2.1. Introduction

This project involves me gathering and documenting requirements for this new app. In this moment in time, there is no app like this in any app store in the world, be it the Google Play app store or the Apple app store. The only app that comes close to this new app is the app called ‘Shazam’. Shazam is an app that can recognize and tell you any song you’re listening to at any given time. It’s honestly the best way to find a song that you have no idea about. Shazam has the ability to let you share your discoveries with your friends if you want, it even has a twitter feature that allows you to follow your favourite artist and find out what they have shazammed. Shazam prides itself in being one of the top ten apps in the world and has more than 500 million users in an amazing 200 countries and is also growing by obtaining over a massive 13 million users each month. This is the platform that I will be basing my app on.

I have been in conversation with close friends and family over the past few months about this idea and they all seem to think that this app could be a success and all have a positive outlook on it. This project will first and foremost involve gathering the requirements for the new app from numerous stakeholders. When I have finished gathering all the requirements for the app, I will proceed to outlining them in greater detail using a requirements specification document. I will formulate this document by using the IEEE template as part of this final year project.

A number of elicitation and analysis techniques will be used in order to fulfil the primary task of collecting requirements for the app. A brainstorming session will be conducted with some of the stakeholder’s present, and this will be mainly the users. This technique will help with detecting any viewpoints that has to do with the apps general layout and any required features. The stakeholders will be handed surveys to complete for them to agree on any features they would like to see on the app. Interviews will also be conducted. Several stakeholders will be interviewed individually to see if they have any app requirements. Focus groups will also be used by mixing stakeholder groups, such as old users with young users, this will make sure that they all have an understanding of each other’s outlook on the app. Focus groups should help solve any problems the app may encounter.

I will use interface analysis to evaluate the types of interfaces that have to do with the app. A use case diagram will be used to conduct this technique.
2.2. **Business Need**

There has not been an app like this invented before. The only app that comes close to this is the one that I have been mentioning all throughout this project, 'Shazam'. If an individual wants to find out information about what they are currently watching, they would have to go through a long stressful process to find their desired information. They would usually look up information about the cast, the producers or where and when the movie/show was created.

This app gives you all that information in a matter of seconds so you don't have to worry about surfing the web and clicking on so many links. The great thing about this app is that, it is literally the first of its kind so it does not have to worry about any competitors in the market.

2.3. **Business Case**

There has been a specific budget given for the creation of this app, which is being developed for profit reasons. When I pitched this idea to friends and family, they were really impressed and had a lot of positive things to say about it. This app has a lot of positives and will be of huge benefit to the public. Once this app is up and running, users will be able to view a great variety of information, such as cast information, the name of the movie, information about the cast, a quick summary of the plot, producers involved, a link to the Wikipedia page, and cinema showings if movie is just recently out. A lot more features could be added in or even taken out during the development of this app.

2.4. **Stakeholder List**

- Business Analyst
- Celebrities
- Movie Company’s
- Users
- Developers
2.5. Importance/Influence Matrix

Importance/Interest Matrix Explanation:
The really important and influential stakeholders are seen in the upper right quadrant of this matrix. These stakeholders include the Business Analyst and the developers. These two stakeholders are important because the business analyst is the person who will conduct elicitation sessions and gather and also document the requirements needed for the developer to essentially create the app. The important stakeholders with low interest can be seen in the top left corner of this matrix. These are the users of TrackIt. They are the ones who will use the app and advise the developers on what features they like or what features they don’t like. It is also important to remember that the business analyst is just a facilitator in this project.
2.6. Requirements Elicitation Techniques

2.6.1. Survey

Survey Participants
- Young users
- Old users
- Male Users
- Female Users

Distribution Method:
Send them out to potential users of the app.

Objective of the Survey:
The main objective of the survey is to collect information from a variety of stakeholders linked with the app. The purpose of the survey is to detect initial requirements and to find out how much certain app features are demanded by the stakeholders. Another purpose the survey will have is to identify any viewpoints that potential users may have for the app. The users will be asked to state any feature they think will help strengthen the app and will also be asked if they would like to participate in any elicitation sessions in the future.

Survey Questions:
What age group would fit you?
- Under 18
- 18 – 24
- 25 – 34
- 35 – 45
- 45+

Gender?
- Male
- Female

What is your current status?
- Student
- Employed
- Retired
- Unemployed
- Full Time
➤ Part Time
➤ Self Employed
➤ Other – Please Specify

Have you heard of Shazam?
➤ Yes
➤ No

If yes, are there any features on the Shazam app that you think would suit this app?
➤ Your answer

Would you buy this app on the app store?
➤ Yes
➤ No
➤ Maybe

How often do you watch movies/TV shows?
➤ Rarely
➤ Sometimes
➤ Always
➤ Never

How many TV shows are you currently watching?
➤ Your answer

Do you visit the cinema frequently?
➤ Yes
➤ No

Do you prefer watching movies/TV shows on a laptop or TV?
➤ Laptop
➤ TV

Do you usually search for information while watching a movie/TV show?
➤ Rarely
➤ Sometimes
➤ Always
➤ Never
If yes, do you tend to do this more on a laptop or a TV
  ➢ Laptop
  ➢ TV

How likely would you be to use this app if it was available on your device?
  ➢ Extremely Likely
  ➢ Very Likely
  ➢ Slightly Likely
  ➢ Never

If you clicked never, please explain why.
  ➢ Your answer

How likely are you to recommend this app to others?
  ➢ Extremely Likely
  ➢ Very Likely
  ➢ Slightly Likely
  ➢ Never

Click the features you would like to see on this app from the list provided below.
  ➢ Like
  ➢ Comment
  ➢ Polls
  ➢ Timeline Feed
  ➢ Notifications
  ➢ Add friends
  ➢ Profile pictures
  ➢ Message friends
  ➢ Individual celebrity timeline
  ➢ News on upcoming movies and shows
  ➢ Provide suggested friends
  ➢ Connect to other social media platforms (e.g. Facebook, Twitter etc)
  ➢ Add stories
  ➢ Upload photos and videos

Please state any other features you think would suit this app.
  ➢ Your answer
If you would like to be contacted again for further questioning, please leave your email address below.

- Your answer

2.6.2. Brainstorming

Brief Overview
The brainstorming session is conducted to collect viewpoints from various stakeholders in relation to the features and potential layout of the app.

Objectives of the Brainstorming Session:
Throughout this meeting, a number of stakeholders, mainly the potential users will be presenting any ideas they may have for the app. Therefore, there should be a vast amount of possible app features obtained during this brainstorming session. The ideas presented will be documented by myself using Microsoft Word. Furthermore, any comments that participants make will be in this document as well. The purpose of this is to help avert from confusion when the requirements are being classified and ranked by the business analyst in the future.

Participants:
- One male young user
- One female young user

Meeting Location:
NCI

Brainstorming Session Rules:
- All parties must ensure they arrive on time in order for the meeting to start on time.
- All participants will be given a certain time to present their ideas and they must not go over their given time.
- When a participant is presenting their ideas, all other participants must keep quiet and refrain from making any comments or asking any questions. They may do so when the presentation is finished.
- When the meeting kicks off, all mobile phones must be switched off.
- If any participant's behaviour is unsatisfactory, the referee will give them a warning but if they continue to behave in a bad manner, the referee will kindly ask them to exit the meeting.
- If a participant arrives late to the meeting, they will be given a time slot at the end of the que.
2.6.3. Interviews

Interview One:

Participants:
One male young users

Interview Location:
NCI

Objectives of the Interview:
The interview is arranged in order to gather details from old users that are male. These users represent all the future old male users that will eventually use and engage with the app. Any issues that have a possibility of arising can be discussed with these participants. The desired result for this interview is to have an understanding of any issues they may have faced using a app like this(Shazam) and then discussing the appropriate options to making sure that this app won't have the same issues. All responses by participants will be documented using Microsoft Word.

Interview Questions:
How often would you use the Shazam app?
What feature would you use the most on the Shazam app?
Do you think any features on that app should be included on this one?

Interview Two:

Participants:
One female young users

Interview Location:
NCI

Objectives of the Interview:
The interview is arranged in order to gather details from young users that are female. These users represent all the future young female users that will eventually use and engage with the app. Any issues that have a possibility of arising can be discussed with these participants. The desired result for this interview is to have an understanding of any issues they may have faced using a app like this(Shazam) and then discussing the
appropriate options to making sure that this app won't have the same issues. All responses by participants will be documented using Microsoft Word.

**Interview Questions:**
Have you heard of an app called Shazam and do you think it is user friendly?
What features on the Shazam app would you say you utilize the most?
What features on the Shazam app do you think would be suitable for this app?
Do you think there are any other features that should be included in this app?

### 2.6.4. Requirements Workshop

**Workshop Preparation Checklist:**
- Find participants that are appropriate so they can attend the requirements workshop.
- Get the location, date, and the time finalised so that the workshop can take place.
- Plan a description of objectives and the outcome desired from the workshop.
- Create the requirements workshop agenda.
- Outline a detailed list of the resources required in the workshop.
- Make sure all the resources are organised before the requirements workshop commences.
- Choose an appropriate medium to invite all participants with. Within this medium, tell them the location, date, and time of the workshop, and a copy of the agenda and rules should be attached.
- Make it your priority to ensure that all participants are available to be present during the workshop.

**Participants:**
- Business Analyst
- One male old user
- One female old user

**Objectives of the Requirements Workshop:**
This requirements workshop has been arranged to essentially talk about the design and layout of the new app. The main objective of this workshop is to gain an overall understanding of the kind of design and layout that are demanded by the users. This objective will be accomplished by analysing the Shazam app in greater detail and also by evaluating the apps first prototype. The next objective will be to detect any app features
that were missed in elicitation sessions that were done before and also to refine the requirements in the apps first prototype. Participants may detect features that are being utilized by the Shazam app and they can decide if they would like to adopt them and use them in this new app.

**Agenda:**

- Define the purpose of the requirements workshop to participants.
- Clearly outline the ground rules of the requirements workshop.
- Outline the final deliverables and what needs to be accomplished by the completion of the requirements workshop.
- Evaluate the first prototype with all the participants.
- Identify additional features which are required on the new app.
- Obtain a general agreement relating to the website apps design, layout, and the desired features amongst all the participants.

**Resources Required:**

- NCI
- Hp Laptop
- Citrix
- Mobile phones, laptops
- Strong and reliable internet connection
- Microsoft Word
- Microsoft PowerPoint

**Workshop Rules:**

- All parties must ensure they arrive on time in order for the meeting to start on time.
- When a participant is presenting their ideas, all other participants must keep quiet and refrain from making any comments or asking any questions. They may do so when the presentation is finished.
- If any participant’s behaviour is unsatisfactory, the referee will give them a warning but if they continue to behave in a bad manner, the referee will kindly ask them to exit the meeting.
- If a participant arrives late to the meeting, they will be given a time slot at the end of the que.
2.6.5. Interface Analysis

Objectives of Interface Analysis:
I will develop a UML use case diagram for the app after the app's prototype is complete and the requirements workshop also. This will be a highly detailed diagram that will convey the interface types that have to do with the app. Every single actor will be able to access specific parts of the app. These actors can be called stakeholders. For example, a user that has signed up to the app will be able to roam around more freely on it but a user who is just using the app for the very first time will have limited access. Any interactions that take place between the stakeholders and the app will be outlined in this diagram. The benefit of this diagram will be that any development confusions will be averted because of this use case diagram.

Resources Required:
- Hp Laptop
- Creately

UML Use Case Diagram Development Checklist:
- Detect potential interface types by evaluating previous elicitation results.
- Review app prototype
- Develop a UML use case diagram for the new app.

UML Use Case Diagram Name:
TrackIt App

UML Use Case Diagram Actors:
Visiting Users
Developers
Members
3. Requirements Elicitation & Analysis Results

3.1. Requirements Elicitation Techniques

3.1.1. Survey

What age group would fit you?  
Gender?

What is your current status?  
Have you heard of Shazam?
Would you buy this app on the app store?  How often do you watch movie/TV shows?

How many TV shows are you currently watching?

Do you visit the cinema frequently?
Do you prefer watching movies on a laptop or a TV?

- Laptop: 30%
- TV: 70%

Would you recommend app?

- Extremely Likely: 12.5%
- Very Likely: 35%
- Slightly Likely: 37.5%
- Never: 15%

Do you usually search for information while watching a movie/TV show?

- Always: 52.5%
- Sometimes: 25%
- Rarely: 15%
- Never: 15%

If yes, do you tend to do this more on a laptop or a TV?

- Laptop: 85%
- TV: 15%

How likely would you be to use this app if it was available on your device?
Click the features you would like to see on this app from the list provided below

Survey Conclusion:
The stakeholders that participated and completed this survey vary in terms of their age, their gender, and their current status. Because of this there was a broad range of suggestions recorded. Participants were able to suggest if any features on the Shazam app would be suitable for this kind of app. A very popular feature on the Shazam app that users tend to use a lot is the profile page feature. Users are able to view their profile and see what songs they have previously shazammed. They can view songs as far back as a year ago. On this page, users will also have the ability to see how many times they have shazammed a song and also see the number of followers they have and how many followers they have. This feature should also be implemented on the TrackIt app, but there will be differences to what you can do on it. On the profile page of the TrackIt app, users will also have the ability to view any movie/TV show they have previously searched for. Users will also be able to see how many followers they have and how many people they are following.

70% of participants said they preferred watching a movie on a laptop rather than a TV and 55% of participants said they search for information online while watching a movie/TV show with 25% of participants saying they always search for information while watching a movie/TV show. This information proves that this kind of app is needed and would be well received by the public with 40% of participants saying they would buy this app if it was available on the app store and 22.5% of participants saying they might.
3.1.2. Brainstorming

The way I conducted this elicitation technique was that I brought together two young male potential users of this app and I presented my idea to them. I then went on to explain the rough prototype I had drawn out as you can see from the screenshots above. Because the two potential users were familiar with Shazam they had a lot of suggestions and comments straight away.
3.1.3. Interview

Participant:
One male user

Interview Questions & Answers:

Have you heard of an app called Shazam and do you think it is user friendly?
Yes, I have heard of that app and I actually use it a lot because I listen to so much music. As you already know I don’t only act, I’m also a musician so this app is really beneficial to me. Yes, I think Shazam is user friendly. The first time I used this app, I didn’t have trouble getting to know how it worked. The first page that came up on my phone was the home page where you search for the song you’re listening to. I felt like this was a smart move by Shazam because that page is what a lot of users will be looking for so they didn’t make it too hard to find.

What features on the Shazam app would you say you utilize the most?
The feature that I really use on a day to day basis would probably be the trending feature. This feature lets you know what songs are popular in every single genre. This feature helps me find new songs that I may not have heard yet. Sometimes I even launch the app just to use this feature even though I’m not listening to any music. Another feature I find very useful on this app is the iTunes feature. This allows you to purchase a song you just shazammed through iTunes. This is really beneficial because when new songs are released, you can only listen to some songs on streaming services such as Tidal and Spotify or if you purchase them and Shazam allows you to do just that. Those are probably the two features that I utilise the most.

What features on the Shazam app do you think would be suitable for this app?
I think the trending feature that I mentioned before would be a useful feature to have in your app, but obviously in terms of a movie/TV show. You can have something like the top 10 movies out right now or even the movies/TV shows that have been searched for the most. I also think the discover page would be a good feature to have on your app. This would let users know what movie/TV show other users are searching for, and any recommended movie/TV show can be shown on this page too. The app should be able to make suitable recommendations based on the previous movie/TV show you have searched for. This would be extremely useful for someone who likes a specific genre like Romance in my opinion because the app will recommend more romance movies to them rather than an action movie. Another feature that I think would be suitable for this app is for the app to have the ability to show the user what they previously searched for. On Shazam, it allows users to see what they shazammed as far back as a year ago. This feature is really useful for me because when I hear a song I like but I’m not able to
listen to it in that moment, I can always listen to it when I have time or when I get home.

**Do you think there are any other features that should be included in this app?**

Well because I’m also a musician as well as an actor, I think a good feature to have is for the app to be able to link the users to an actor or an actress’s music if they are a musician and also if they act. Take Jamie Foxx for example, not only is he a successful actor but he is also a successful musician who has a lot of songs. There should be a feature in the app that links the user to his music. I also suggest that the app should give users the option to connect to other apps such as Facebook, Instagram and Twitter. This will give the app a sense of interaction and will also make it more social. Another way you can make this app more social in my opinion is if you allow users to make polls. This is a feature that is very popular right now on Twitter and I use it a lot. The poll can literally be about anything but in the case of this app, users may be restricted to ask questions like, “what film do you think is better?”, or “what season do you prefer?” This will make your app more interactive I feel by starting debates between users.

**Interview Conclusion:**

A lot of information was gathered from this interview and a large number of requirements were acquired. In my mid-point presentation, I stated that I was going to conduct two interviews but I only managed to conduct one due to unforeseen events. I managed to conduct one interview though, with an individual named Percy Chamburuka but he goes by the name “Jafaris”. He is a musician and an actor who acted in the 2016 musical coming-of-age comedy-drama film co-written, co-produced and directed by John Carney called “Sing Street”. This male potential user made a lot of recommendations and I will make sure I review them and try to implement them into the app. This member stated that on the Shazam app he tends to utilise the trending feature a lot. I really thought this was a good idea because this feature could be really beneficial to this app as well. This is one of my favourite features to use on the Shazam app as well. I find it very useful especially when you are looking for new music to listen to. The way I’ll implement this feature on my app is by showing users what movie/TV shows are searched for the most.

This interview was really beneficial and the user provided me with some useful requirements for the TrackIt App. The next stage of this project that I will embark on will be finalising the apps design and layout. I will achieve this by using the requirements workshop and prototyping while also taking the other elicitation techniques into consideration.
3.1.4. Prototyping

Home Page

Feed Page

Results Page

Profile Page
Prototype Conclusion:
I created this prototype using an application prototyping platform called Proto.io. I used the results of four elicitation techniques to create this prototype. The elicitation techniques I used were a requirements workshop, a brainstorming session, a survey, and an interview. Before I started working on the prototype I had a fair idea of what the app was going to look like because of the brainstorming session that took place. I took ideas down using pen and paper during this session and used this as a foundation for the prototype. But after all these four elicitation techniques were completed I began developing the final prototype using Proto.io.
3.1.5. Requirements Workshop

This requirement gathering and validation workshop took place with the business analyst, one potential young male user and one potential old female user. After taking them through the notes from the brainstorming session and all the ideas I had, they made a few comments and suggestions of their own. All the comments and suggestions they had will be taken into consideration and implemented when creating the final prototype.

Because I only used pen and paper during the brainstorming session for the prototype, there were a lot of changes made. When I presented the rough prototype to the two potential users, they had a lot to say and they suggested some features that should be implemented in the final prototype. The female made a great suggestion that in my opinion will be of huge benefit to this app. She suggested that the app should not only have the ability to detect a movie/TV show by voice recognition alone but also by facial recognition. This feature will aid this app immensely because if a scenario arises that a user can’t detect the movie/TV show they are currently watching through voice recognition for some reason, they could just opt to try the facial recognition feature and they’ll receive results. This provides the user with more than one way to receive information. The male suggested to have a feature on this app that was in the Shazam app. He suggested that the app should have the ability to allow the user to see any previous movie/TV show they searched for. I took this on board and thought it was a very good idea. This feature will be displayed on the user’s profile page.

They were both impressed with how I designed the Home Page and said it looked really user friendly. They also suggested that I should add a rating feature in the form of five stars on the page where users find the movie/TV show that they searched for, so that they can rate what they are currently watching and other users can rate and see how good the movie/TV show is. The male user also suggested to let users have the option to upload profile pictures so that they can recognise any of their friends if they come across them on the app. The female user thinks the app should allow the users to go live. This is basically when you record a video in real time and your friends can see what you’re doing while you are still recording the video, hence the term ‘live’. This feature is very popular right now and applications such as Instagram, Facebook, Twitter and Periscope all use it. She also suggested to that the app should allow users to add stories on their profiles. This is basically when you take a picture or short video, usually not lasting more than 10 seconds and post it on your profile for your friends to see. This is also another very popular feature right now started by Snapchat, but other apps such as Messenger, WhatsApp, and Instagram have started using this feature. They both then suggested that all these features should only be available to users who are members and have signed up to the app. Any user that is a visitor should only be able to search for a movie/TV show and that’s it.
3.1.6. Interface Analysis

**UML Use Case Diagram:**

![UML Use Case Diagram](image)

**UML Use Case Diagram Conclusion:**

This use case diagram conveys the relationship that will exist between the project stakeholders and the TrackIt app. The actors can be seen on the outskirts of the UML use case diagram. Each of the actors shown above has some sort of a relationship with at least one use case in the diagram. For example, a visiting user can only search for a movie/TV show via audio recognition. Whereas a user who has signed up to the app and is a member can search for a movie via audio and facial recognition and they also have other features available to them that a visiting user wouldn’t have. Some of these features are being able to have a profile so that you can interact with friends on the app, going live, adding stories and getting notified about celebrity birthdays etc. This use case diagram makes sure that the app will be protected from any unauthorised use through unqualified stakeholders. If a visiting user could access a feature like having a profile and interacting with friends, that would take away the whole point of being a member because that’s one of the benefits that comes with it.
4. IEEE Website Requirements Specification

4.1. Introduction

4.1.1. Purpose
This IEEE requirements specification document is being developed for this app called TrackIt. In this report, I will specify in a precise manner the main functional and non-functional requirements which shall be associated with the website. The approval of the document by the customer is essential before this document can be given to the developer. Any changes that the project stakeholders feel they need to make needs to be implemented before this app is developed.

4.1.2. Scope
This app is being developed for a number of stakeholders. An app like this hasn’t been invented yet and it will be really beneficial to the public. I say this because when I pitched this idea to family and friends they all had positive comments to say and thought the public could do with an app like this. This app will solve a lot of questions users will have about what they are currently watching. There is no way for users to get a fully detailed background on the movie/TV show they are watching without having to spend a few minutes on the web to find out. This app solves that problem and provides users with all the information they need within a matter of seconds. Users who sign up to the app and are members will have a whole host of features available to them, whereas visiting users will be restricted to only being able to search for a movie/TV show via audio recognition.

4.1.3. Definitions, Acronyms and Abbreviations
User: A stakeholder that interacts with the TrackIt app.

Administrator: A stakeholder that has the ability to login and make changes to certain areas within the TrackIt app.

Stakeholder: A certain individual that may interact with the app but this person won’t be able to be the developer of the TrackIt app
4.2. Functional Requirements

4.2.1. User Class One – User

Functional Requirements 1.1

Identification Code:
FR1

Title:
TrackIt navigation links

Description:
These four links are very important for the app. These four links will be displayed at the bottom of every page on the app and allows the user to move around freely. These four links are the home page, the profile page, the settings page and the timeline feed.

Location:
Every page on the TrackIt app except the camera page.

Reasoning:
These four navigational links will allow users to move around the app without any hassle so that they can view the page they want to get to.

Priority:
Must Have (High Priority).
Functional Requirements 1.2

Identification Code:
FR2

Title:
Home page link

Description:
This link will be visible on every single page of the app except for when members are searching for a movie/TV show using the facial recognition feature. When this link is tapped by the user, it will bring the user to the home page, which is the first page they will see when they launch the app. This link will be displayed with a house icon and text underneath it labelled “Home”.

Location:
Every page on the TrackIt app except the camera page.

Reasoning:
This link is designed to help the user get back to the opening page of the app. The opening page is the page where they search for what they are watching using audio recognition.

Priority:
Must Have (High Priority).

Functional Requirement 1.3

Identification Code:
FR3

Title:
Profile page link

Description:
This link will be visible on every single page of the app except for when members are searching for a movie/TV show using the facial recognition feature. When this link is tapped by the user, it will bring the user to their profile page. This link will be displayed with an invisible avatar icon and text underneath it labelled “Profile”.

Location:
Every page on the TrackIt app except the camera page.

Reasoning:
This link is designed to help the user get to their profile page where they can view any previous searches they have made and they also have the option to upload a profile picture or not.

Priority:
Must Have (High Priority).

**Functional Requirement 1.4**

Identification Code:
FR4

Title:
Settings page link

Description:
This link will be visible on every single page of the app except for when members are searching for a movie/TV show using the facial recognition feature which is the camera page. When this link is tapped by the user, it will bring the user to the settings page. This link will be displayed with a cog wheel icon and text underneath it labelled “Settings”. This page will allow members to optimize their profile, such as changing their username and connecting to other apps. This is also the page where members can log out of the app if they please.

Location:
Every page on the TrackIt app except the camera page

Reasoning:
This link is designed to help the user get to the settings page and alter any changes to their profile that they want.

Priority:
Must Have (High Priority).
Functional Requirement 1.5

Identification Code:
FR5

Title:
Timeline Feed link

Description:
This link will be visible on every single page of the app except for when members are searching for a movie/TV show using the facial recognition feature which is the camera page. When this link is tapped by the user, it will bring the user to the feed page. This link will be displayed with a globe icon and text underneath it labelled “Feed”. There will be a whole host of information on this page. The user will be able to see what the celebrities they follow are searching for.

Location:
Every page on the TrackIt app except the camera page.

Reasoning:
This link is designed to help the user get to the timeline feed of the app. This is the page where most of the interaction with friends will take place. This page will also recommend movie/TV shows based on what the user has previously searched for.

Priority:
Must Have (High Priority).

Functional Requirement 1.6

Identification Code:
FR6

Title:
Search button

Description:
This link will be on the home page of the app. It will be very visible because it will be a big circle displayed in the middle of the page and using it will be relatively easy. This
button will be displayed with a circle with stripes with text underneath giving the following instruction, “Tap to Search”.

**Location:**
Home Page

**Reasoning:**
This button is designed to help users find the movie/TV show they are watching. All they have to do is tap the button and the app will open another page where the user can see information about the movie.

**Priority:**
Must Have (High Priority).

**Functional Requirement 1.7**

**Identification Code:**
FR7

**Title:**
Search bar

**Description:**
The search bar will have different functions on the profile, feed and home pages on the app. It ultimately does the same thing but just produces different results on the individual pages. The search bar will be displayed with a text box which you can type in and a beside it a magnifying glass icon that you tap to begin your search.

**Location:**
Profile Page, Feed Page, Home Page

**Reasoning:**
The search bar is designed to help users retrieve information. The information that will be retrieved on the profile page by the user is any movie/TV show you have previously searched for. The information that will be retrieved on the feed page by the user is any friends or celebrities you have followed. The information that will be retrieved on the home page by the user will strictly be any actors and actress’s users may want to find and follow.
Priority:
Must Have (High Priority).

Functional Requirement 1.8

Identification Code:
FR8

Title:
Cinema listings link

Description:
This link will bring users to a page where they can view a movie that is currently showing in the cinemas. This link will be displayed as a text labelled “Cinema”.

Location:
Results Page

Reasoning:
This page will contain information concerning the day the movie is showing, the time, and most importantly what cinema will be showing the movie.

Priority:
Should Have (Medium Priority).

Functional Requirement 1.9

Identification Code:
FR9

Title:
Polls link page

Description:
This poll feature will bring users to a page where they can create polls and potentially share them to their followers. This button will be displayed as a piece of paper at the top right hand corner of the timeline feed just below the search box.

Location:
Feed Page
Reasoning:
This feature makes the app more interactive and fun to use for users. These polls can be highly informative as well, giving users a better understanding about a movie/TV show.

Priority:
Should Have (Medium Priority)

Functional Requirement 1.10

Identification Codes:
FR10

Title:
Camera Page button

Description:
This button will be on the home page on the top left hand corner displayed as a camera icon. Once the user taps this icon, they will be taken to the camera page where they can perform facial recognition. This page will be user friendly so you have the ability to choose if you want the flash to be on or not. The user should ensure that the phone is stable in their hands and the camera is also focused, so that the app can recognise the actor or actresses face.

Location:
Home Page

Reasoning:
The app needs a camera feature for facial recognition to be effective. Without the camera page, facial recognition won’t work and will be pointless.

Priority:
Must Have (High Priority)

Functional Requirement 1.11

Identification Code:
FR11
**Title:**
Music link

**Description:**
This link will be on any actor/actress’s page who is also a musician. This link will be on their designated profile pages right beside their profile picture. It will be displayed as a music icon which will redirect the user to their music discography on Apple Music.

**Location:**
Profile page (actor/actress who is also a musician)

**Reasoning:**
The male user I interviewed who is an actor and a musician suggested that this would be a good feature to have and that it would benefit the app.

**Priority:**
Should Have (Medium Priority).

**Functional Requirement 1.12**

**Identification Code:**
FR12

**Title:**
Login system for members

**Description:**
The system should allow users who are members to sign into their accounts by using their own created username and their own personal passwords. This will allow members to access features that visiting users won’t be able to access. The login system will for members will be at the top of the home page between the camera icon and search icon. The sign up option will be on the opening page at the bottom of the page if they decide to sign up to the app.

**Location:**
Home Page for members and Opening page for non-members
Reasoning:
This

Priority:
Must Have (High Priority).

4.2.2. User Class Two – Administrator

Functional Requirement 2.1

Identification Code:
FR13

Event:
Developer login

Dependency:
Before a developer can update anything on the app, they will be required to login. The updates that a developer could make is either adding a movie/TV show to the app or removing a movie/TV show from the app. The developer must have a valid username and password on the app before he/she can make any alterations to the app.

Outcome:
After the developer has successfully logged into the app, they will now be authorised to make alterations to the TrackIt app. Moreover, if an unsuccessful login occurs, a message will appear on the screen saying ‘incorrect username or password’.

4.3. Non-Functional Requirements

4.3.1. Security Requirements

Identification Code:
FR12

Title:
Login system
Rationale:
The user profiles won’t be able to be altered by the developers of the app. They won’t be able to change a user’s profile picture, change their usernames, or any other information the user has. User profiles can only be modified by the user. This way, any data they have on the app will be secured because they are the only ones who can access it and modify it to their needs. A user’s password shouldn’t be more than 8 characters long and must contain at least a number and a letter.

Identification Code:
FR13

Event:
Developer login

Rationale:
The username and password the developer chooses shouldn’t be more than 8 characters long and must include at least one letter and one number. If a scenario occurs where the developer has typed in the wrong username or password more than three times, then they will be locked out of the app and an alert will be sent to another developer. This is to prevent hackers from getting into the system.

4.3.2. Performance Requirements

Identification Code:
FR12

Title:
Login System

Rationale:
The users profile page should load and open within 7 seconds of them typing in their username and password. If the user types in the wrong password and username, then the app should automatically show an alert message informing them of this within 2 seconds.

Identification Code:
FR13
Title: Developer Login

Rationale: When a developer types in their username and password, they should be into the system within 7 seconds. If a developer types in the wrong username or password, they'll be notified by an alert messaging popping up that they've done so and have 2 more attempts remaining. This should take no longer than 1 second to occur. If a scenario arises where the developer got his/her username or password wrong at the third attempt, then an alert will be sent out to another developer. The alert should be sent out to the developer within a minute of the third attempt being wrong. Any modification made by the developer should update to the app after one minute.

Identification Code: FR6

Title: Search Button

Rationale: When a user searches for a movie/TV show via audio recognition using the search button, they should get their result within 5 seconds of them tapping the button. If the app fails to identify the movie/TV show, an alert message should pop up within 10 seconds advising the user to please try again.

Identification Code: FR10

Title: Camera Button

Rationale: When a user searches for a movie/TV show via facial recognition using the camera button, they should get their result within 7 seconds of them holding the phone still and focusing the camera on the actor/actress’s face. If the app fails to identify the movie/TV show, an alert message should pop up within 10 seconds, advising the user to try again.
4.3.3. Availability Requirements

**Identification Code:**
FR12

**Title:**
Login System

**Rationale:**
A user that’s a member will have the login feature available to them 24 hours a day, 365 days a year. This will allow users to login anytime they want to alter any changes to their profile that they want.

**Identification Code:**
FR13

**Title:**
Developer Login

**Rationale:**
A developer will always be able to log into the app to make any modifications whenever they please.
5. Conclusion

This project has really been challenging but all in all I enjoyed the experience of undergoing it and it was a really rewarding experience too. I learned so much from doing this project. I now have an in-depth knowledge of how audio and facial recognition work. These are two very interesting technologies that are used in most companies today. Certain CEO’s use facial recognition to access secure parts of their organisation because this is a safe and secure way to protect your most valuable assets. I underwent various elicitation techniques during the formulation of this project and I learned a great deal from each one. I now know how to conduct a requirements workshop and what it entails. This will be a good tool for me going forward in my career because I may need to utilise the elicitation technique again.

5.1. Further Developments

The main function of this app as you already know is it has the ability to detect a movie/TV show the user is watching and it provides information on that movie/TV show. It detects this using audio or facial recognition technology. This app will be available to download on the app store for iPhone or android users. Maybe somewhere down the line we can make it available to windows viewer in order to attract another market audience.

A website will be made in the near future, providing the public with more information on what the application is about and will give them an in depth knowledge as to how it actually operates. Right now users don’t have the option to purchase a movie/TV show they have found and I feel this will be a very useful feature to have on the app.
6. Bibliography

http://coding-geek.com/how-Shazam-works/?session-id=5d53242ea739c61139553f7b1e7ed86a


http://www.absoluteastronomy.com/topics/MusicBrainz?&session-id=5d53242ea739c61139553f7b1e7ed86a

http://www.newmedialab.com.au/media_monitoring.html?&session-id=5d53242ea739c61139553f7b1e7ed86a

7. Appendix

7.1. Project Proposal

7.1.1. Project Objectives

The objective of this project is to develop an IEEE requirements specification document for my TrackIt mobile application using information obtained from different stakeholders using a number of elicitation techniques. Because of this, the project will involve gathering requirements from many potential users of the app. I will cover areas such as how the user wants the app to be designed and any features they think would be suitable for an application like this as well as other areas during the requirements elicitation technique phase of the project. Once all the requirements for the project has been gathered, by using elicitation techniques like, interviews, requirement workshops, brainstorming, I will then document them in a requirements specification document. I will also have to complete other throughout the life of this project. These tasks include creating a project proposal,

The purpose of this app will be to identify any TV show or movie the user is currently watching. This app will give the user information about the movie or TV show.
The aim of this app is to save the user a lot of time because when we are watching a movie or TV show and we start to like it and get into it, we tend to look up information about the movie and this takes a lot of time and can be sometimes frustrating. This app will have the ability to detect what the user is watching in a matter of seconds. When the app has detected what the user is watching, the app will display the following:

- The name of the movie
- Information about the cast
- A quick summary of the plot
- Producers involved
- A link to the Wikipedia page
- Cinema showings if movie is just recently out

The aim is to do a requirements specification document so that when it comes to the development stage, the programmers will know what and how to write the code. Now for how the app will actually work. It all comes down to audio fingerprinting. An audio fingerprint is a digital summary that can be used to identify an audio sample or quickly locate similar items in an audio database. For example, when you’re humming a song to someone, you’re creating a fingerprint because you’re extracting from the music what you think is essential (and if you’re a good singer, the person will recognize the song).

The app will also give in depth tutorials to all first time users, giving them an opportunity to use the app to its full potential and get the best out of it.

7.1.2. Background

The reason why I have chosen this idea as my final year project is because I have experienced this situation on numerous occasions. When we are watching something and you want to find information about what we are watching, we tend to pause the movie or show so we can find out information about what we are watching, be it the characters real names or even information about the producers involved etc. We want to know what we are watching and this can sometimes take up valuable time that we might not have at that specific moment. This app aims to fix this dilemma just by tapping a button on your phone and voilà, you will get all the information you need in a matter of seconds. You’re probably thinking right now that this idea sounds a lot like the app called ‘Shazam’. Well, that’s cause it is, you can say that I was in a way inspired by their app. The day I discovered Shazam on the app store I was so relieved. It helped me solve a lot of my musical needs and that’s what I hope to achieve with this app as well.

Let me tell you a little about shazam. Shazam is an app that can recognise and tell you any song you’re listening to at any given time. It’s honestly the best way to find a song that you have no idea about. Shazam has the ability to let you share your discoveries.
with your friends if you want, it even has the twitter feature that allows you to follow your favourite artist and find out what they have shazammed. Shazam prides itself in being one of the top ten apps in the world and has more than 500 million users in an amazing 200 countries and is also growing by obtaining over a massive 13 million users each month. This is the platform that I will be basing my app on. Throughout this project I will collect and document as I go along various requirements that have to do with the TrackIt app.

7.1.3. Technical Approach

After I finished completing my project concept, I immediately started my research on the different tools I’ll be able to use in order to develop an efficient requirements based app for the project showcase. The tools I decided to utilise were Creately for the UML use case diagram and Proto.io for creating the prototypes. Proto.io is an application prototyping platform launched in 2011 and developed by the Labs Division of SNQ Digital. It is an application designed that allows users to prototype on mobile devices. I chose this application because it is highly user friendly in the sense that it utilizes a drag and drop user interface and does not require any coding whatsoever.

7.1.4. Special resources required

I will have to look up YouTube videos on how to use Proto.io but I figure it shouldn’t be too difficult to use. When I have learnt how to use the app I will then start developing the prototype.

- Hp Laptop
- Citrix
- Mobile phones, laptops
- Strong and reliable internet connection
- Microsoft Word
- Microsoft PowerPoint
7.1.5. Project Plan

Note:
WBS from Microsoft Project is contained within the next few pages of the project proposal document.

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<td>27</td>
</tr>
<tr>
<td>Put Mid-Point Presentation File together</td>
<td>1 day</td>
<td>Sat 10/12/16</td>
<td>Sat 10/12/16</td>
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</tr>
<tr>
<td>Upload Mid-Point Presentation File</td>
<td>1 day</td>
<td>Mon 12/12/16</td>
<td>Mon 12/12/16</td>
<td>29</td>
</tr>
<tr>
<td>Supervisor Meeting</td>
<td>1 day</td>
<td>Tue 13/12/16</td>
<td>Tue 13/12/16</td>
<td></td>
</tr>
<tr>
<td>Practice presentation</td>
<td>1 day</td>
<td>Thu 15/12/16</td>
<td>Thu 15/12/16</td>
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</tr>
<tr>
<td>Do Mid-Point Presentation</td>
<td>1 day</td>
<td>Tue 20/12/16</td>
<td>Tue 20/12/16</td>
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</tr>
<tr>
<td>Task Description</td>
<td>Duration</td>
<td>Start Date</td>
<td>End Date</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>----------</td>
<td>---------------------</td>
<td>-------------</td>
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</tr>
<tr>
<td>Start studying for exams</td>
<td>14 days</td>
<td>Tue 27/12/16</td>
<td>Fri 13/01/17</td>
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<tr>
<td>Do AGM exam</td>
<td>1 day</td>
<td>Mon 16/01/17</td>
<td>Mon 16/01/17</td>
<td></td>
</tr>
<tr>
<td>Do BPM exam</td>
<td>1 day</td>
<td>Mon 16/01/17</td>
<td>Mon 16/01/17</td>
<td></td>
</tr>
<tr>
<td>Conduct Interview</td>
<td>1 day</td>
<td>Tue 17/01/17</td>
<td>Tue 17/01/17</td>
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<tr>
<td>Conduct Brainstorming Session</td>
<td>1 day</td>
<td>Fri 20/01/17</td>
<td>Fri 20/01/17</td>
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</tr>
<tr>
<td>Create Reflective Journal (December)</td>
<td>1 day</td>
<td>Wed 25/01/17</td>
<td>Wed 25/01/17</td>
<td></td>
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<tr>
<td>Upload Reflective Journal (December)</td>
<td>1 day</td>
<td>Thu 26/01/17</td>
<td>Thu 26/01/17</td>
<td></td>
</tr>
<tr>
<td>Supervisor Meeting</td>
<td>1 day</td>
<td>Thu 02/02/17</td>
<td>Thu 02/02/17</td>
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<tr>
<td>Conduct Requirements Workshop</td>
<td>1 day</td>
<td>Mon 06/02/17</td>
<td>Mon 06/02/17</td>
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<tr>
<td>Create Draft of Survey</td>
<td>2 days</td>
<td>Fri 10/02/17</td>
<td>Mon 13/02/17</td>
<td></td>
</tr>
<tr>
<td>Research facial recognition software</td>
<td>6 days</td>
<td>Wed 15/02/17</td>
<td>Wed 22/02/17</td>
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<tr>
<td>Research AGM assignment</td>
<td>2 days</td>
<td>Fri 21/10/16</td>
<td>Mon 24/10/16</td>
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<tr>
<td>Research BPM assignment</td>
<td>2 days</td>
<td>Sat 25/02/17</td>
<td>Mon 27/02/17</td>
<td></td>
</tr>
<tr>
<td>Create Reflective Journal (January)</td>
<td>1 day</td>
<td>Mon 27/02/17</td>
<td>Mon 27/02/17</td>
<td></td>
</tr>
<tr>
<td>Upload Reflective Journal (January)</td>
<td>1 day</td>
<td>Tue 28/02/17</td>
<td>Tue 28/02/17</td>
<td></td>
</tr>
<tr>
<td>Finalised Survey</td>
<td>3 days</td>
<td>Fri 03/03/17</td>
<td>Tue 07/03/17</td>
<td></td>
</tr>
<tr>
<td>Created UML Use Case Diagram</td>
<td>2 days</td>
<td>Thu 09/03/17</td>
<td>Fri 10/03/17</td>
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<tr>
<td>Sent out survey</td>
<td>1 day</td>
<td>Wed 08/03/17</td>
<td>Wed 08/03/17</td>
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<tr>
<td>Reviewed responses</td>
<td>2 days</td>
<td>Mon 13/03/17</td>
<td>Tue 14/03/17</td>
<td></td>
</tr>
<tr>
<td>Created Prototype</td>
<td>4 days</td>
<td>Fri 17/03/17</td>
<td>Wed 22/03/17</td>
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<tr>
<td>Supervisor Meeting</td>
<td>1 day</td>
<td>Thu 23/03/17</td>
<td>Thu 23/03/17</td>
<td></td>
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<tr>
<td>Uploaded BPM assignment</td>
<td>1 day</td>
<td>Mon 27/03/17</td>
<td>Mon 27/03/17</td>
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<tr>
<td>Uploaded AGM assignment</td>
<td>1 day</td>
<td>Wed 29/03/17</td>
<td>Wed 29/03/17</td>
<td></td>
</tr>
<tr>
<td>Create Reflective Journal (February)</td>
<td>1 day</td>
<td>Thu 30/03/17</td>
<td>Thu 30/03/17</td>
<td></td>
</tr>
<tr>
<td>Upload Reflective Journal (February)</td>
<td>1 day</td>
<td>Fri 31/03/17</td>
<td>Fri 31/03/17</td>
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<tr>
<td>Event</td>
<td>Duration</td>
<td>Start Date</td>
<td>End Date</td>
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<td>------------------</td>
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</tr>
<tr>
<td>Formulate IEEE Requirements</td>
<td>28 days</td>
<td>Sat 01/04/17</td>
<td>Tue 09/05/17</td>
<td></td>
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<td>Specification Document</td>
<td>1 day</td>
<td>Wed 05/04/17</td>
<td>Wed 05/04/17</td>
<td></td>
</tr>
<tr>
<td>Supervisor Meeting via phone call</td>
<td>1 day</td>
<td>Tue 11/04/17</td>
<td>Tue 11/04/17</td>
<td></td>
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<td>Design poster</td>
<td>2 days</td>
<td>Fri 07/04/17</td>
<td>Mon 10/04/17</td>
<td></td>
</tr>
<tr>
<td>Create Reflective Journal (March)</td>
<td>1 day</td>
<td>Mon 01/05/17</td>
<td>Mon 01/05/17</td>
<td></td>
</tr>
<tr>
<td>Upload Reflective Journal (March)</td>
<td>1 day</td>
<td>Tue 02/05/17</td>
<td>Tue 02/05/17</td>
<td></td>
</tr>
<tr>
<td>Create Reflective Journal (April)</td>
<td>1 day</td>
<td>Thu 11/05/17</td>
<td>Mon 15/05/17</td>
<td></td>
</tr>
<tr>
<td>Review IEEE Document</td>
<td>4 days</td>
<td>Wed 10/05/17</td>
<td>Mon 15/05/17</td>
<td></td>
</tr>
<tr>
<td>Upload final document</td>
<td>1 day</td>
<td>Tue 16/05/17</td>
<td>Tue 16/05/17</td>
<td></td>
</tr>
<tr>
<td>Create Final Presentation</td>
<td>3 days</td>
<td>Thu 11/05/17</td>
<td>Mon 15/05/17</td>
<td></td>
</tr>
<tr>
<td>Practice for Presentation</td>
<td>1 day</td>
<td>Tue 16/05/17</td>
<td>Tue 16/05/17</td>
<td></td>
</tr>
<tr>
<td>Do Presentation</td>
<td>1 day</td>
<td>Wed 17/05/17</td>
<td>Wed 17/05/17</td>
<td></td>
</tr>
<tr>
<td>Prepare for Project Showcase</td>
<td>4 days</td>
<td>Fri 19/05/17</td>
<td>Wed 24/05/17</td>
<td></td>
</tr>
<tr>
<td>Do Project Showcase</td>
<td>1 day</td>
<td>Thu 25/05/17</td>
<td>Thu 25/05/17</td>
<td></td>
</tr>
</tbody>
</table>

7.1.6. Technical Details

- TrackIt will fingerprint an enormous amount of audio from movies/TV show and it will store all these fingerprints in a secure database.
- A user will then search for the movie/TV show by tapping the search button, which fingerprints a sample of audio.
- After this procedure is completed, the TrackIt app will then go on to upload the fingerprint to the apps service, which runs a search in the database for a fingerprint that matches.
- If a fingerprint that matches is detected, the app will display the movie/TV show to the user and all the information they need will be provided.
7.1.7. Evaluation

I will utilise a number of requirements elicitation techniques as a foundation for my final requirements specification document. These techniques will vary from interviews, interface analysis, requirements workshops, brainstorming sessions and surveys. These are the primary techniques I have in mind to use but other requirements elicitation techniques might be utilised as well. Techniques such as focus groups, document analysis and acceptance and evaluation criteria could be used. When I begin to implement each of these techniques, they will provide a good foundation towards formulating a really detailed and also a functional requirements specification document.

Once I have completed this document, then the next phase will be established, which is developing a prototype of the app based on all the information the requirements specification document consists of.

The final prototype will be finalised once all the requirements from stakeholders are documented. After the midpoint presentation in December, I will be adding information up until the project is due, which is on the 10th of May 2017. I’ll be conducting regular meetings with potential users because this will decrease the possibility of not receiving all the requirements I’ll need for the project. Once I’ve gathered all the requirements and the prototype is complete, I’ll arrange a meeting with my supervisor so that we can review the document. An evaluation of the positive and negative parts of this project will take place during this meeting, and any feedback that he gives me will be noted and any changes I need to make will be made.
7.2. Monthly Reflective Journals

7.2.1. September

Student name: Olaoluwa Esho

Programme: BSc (Hons) in Technology Management

Month: September

My Achievements
This month, I resumed college on the 19\textsuperscript{th} September 2016 in the National College of Ireland (NCI). I am now in my final year of college and I am currently studying BSc (Hons) in Technology Management with a specialisation in Business Analysis.

After the first lecture I had on Monday the 19\textsuperscript{th} of September in SCR3, I began to brainstorm possible project ideas based on all the skills I have learnt since starting college in 2013. Coming up with ideas during this brainstorm was not easy at all. It literally took me over a week to come up with a decent idea. Because of my huge interest in entertainment, my idea came from this. I came up with a lot of ideas but I finally decided to go with an app. The idea behind this app is that it has the ability to identify any TV show or movie you are currently watching. The app will then provide you with any relevant information regarding the movie or TV show. I came up with this idea because of a personal experience that I had. I was watching House of Cards on my laptop using Netflix one day and I wanted to find out information about a character on the show, Doug Stamper, whose real name is actually Michael Kelly. I remember the amount of time I spent trying to find out the information, then I thought to myself wouldn’t this be easier if there was an app for this, an app like ‘Shazam’. So I said, “why not just have one for TV shows?” This is how my project idea came into fruition.

I began working on my project pitch once I finished establishing the concept of my project. I was scheduled to pitch my project idea on the 5\textsuperscript{th} October 2016 at 15:50 in room 2.05 in college and the due date for the slides to be submitted on Moodle was on the 3\textsuperscript{rd} October 2016 before 11:55pm. Thankfully I submitted my slides on time then I began to practice how I will pitch my idea.
7.2.2. October

Student name: Olaoluwa Esho

Programme: BSc (Hons) in Technology Management

Month: October

My Achievements
This was the month for my project pitch. There were a few problems with my idea when I went in to pitch my idea to the lecturers. At first there were some complications in the sense that they thought the idea that I came up with would be too technical because I am specializing in business analysis but thankfully my idea got accepted and we eventually came to the conclusion that I would just do a user requirement for the app. I will basically just be gathering requirements on what the user would want the app to look like.

I have been so occupied with other modules this month and the workload is starting to pile up. October was a very busy month for me because I had numerous CA’s to study for and also a few assignments to submit so I had to balance them out and have a plan to achieve them successfully. I had a big 30% CA due on the 30th of this month for Strategic Management so this is where most of my focus went to. I attempted to have a meeting with my project supervisor in this month but the meeting did not take place. I emailed him at joe.mulumby@ncirl.ie but got no reply. I might have the wrong email address but I’ll try my best to find out the right one and set up a meeting as soon as possible. I will also start the requirement specification that is due soon and also my reflective journal for the month of November. These document sections contain the introduction to the project, a materials section, a literature review and a methods section. Despite not meeting with my supervisor this month, I am highly motivated to begin to make progress on my final year project over the next few weeks and good progress at that.
7.2.3. November

Student name: Olaoluwa Esho

Programme: BSc (Hons) in Technology Management

Month: November

My Achievements
During the month of November, I started developing my requirement specification document. In this document, I had to talk about the business need, business case, a stakeholder list, and it outlines the various requirement elicitation techniques that I will be utilising during the requirements collection phase of this project. These techniques are a survey, brainstorming session, an interviews, a requirements workshop, interface analysis, document analysis. I have also outlined in the requirements specification document distinct details that has to do with the techniques such as the kind of participants that will participate, where activities will be taking place, what time these activities will be taking place, and the objectives and rules of these activities. All in all, I think that November was my most productive month so far because I have set out the techniques that I will be using for collecting requirements and I have prepared really well for these sessions. I will still need to gather some of these requirements before the year runs out because my semester one exams begin in early January and that will be my main focus until they are over, so I am just trying to get everything that has to do with the project done before January. I tried my best to meet up again with my supervisor this month but once again I failed in doing so. This was because the workload from this project and other modules was a bit too much and I just didn’t get around to it but I will definitely meet up with him next month so that he can give me feedback on my project. I plan to meet with him before the mid-point presentations so that I will be well prepared going into it.
7.2.4. December

Student name: Olaoluwa Esho

Programme: BSc (Hons) in Technology Management

Month: December

My Achievements
During the month of December, I completed the planning stage of the requirement specification document. I plan to use 6 elicitation techniques when gathering requirements during this phase. But these techniques could change over the course of the project. The requirement specification document consists of a short introduction, a business case, and a business need. This document will also contain specific details of all the elicitation techniques that I plan to utilise. The elicitation techniques that I have chosen to utilise are a brainstorming session, an interview, a survey, a requirements workshop and interface analysis.

Because of the Christmas exams coming up next month, I won’t be able to work on the project as much as I would like. I have 5 exams from the 5th to the 14th of January 2017. I won’t be working on the project during this period but I intend to catch up on the work during the one week break I have after exams are over. During this one-week period I plan to collect requirements that have to do with my project by undergoing various elicitation techniques such as surveys, brainstorming sessions, and requirement workshops etc.

Supervisor Meeting:
I met with my supervisor this month on the 13th of December at 20:00 in NCI on the 3rd floor in the Associate Faculty Room. We discussed various aspects of my requirement specification document during this meeting. Because the mid-point presentation was on the 19th and 20th of December we discussed elements associated with that. I outlined that I have a fair understanding of how I’m going to conduct the future elicitation techniques that I have planned. I was also having trouble identifying the stakeholders who were involved in the project, but my supervisor helped me to have a better understanding of this.
7.2.5. January

**Student name:** Olaoluwa Esho

**Programme:** BSc (Hons) in Technology Management

**Month:** January

**My Achievements**
I couldn’t get much of the project work done at the start of the month in January due to my exams which were from the 5th to the 14th of January. But when all my exams were finished, I got straight back into the project. During the week off I had, I started conducting some of the elicitation techniques that I had planned to do the month before. I conducted the interview in this month with one male user. I previously planned to conduct 2 interviews in this month, the other interview was meant to be with a female user, but the interview couldn’t take place due to unforeseen events. Even though I could only manage to do one interview, I feel like it was a very productive and effective interview. I say this because I received some requirements from this user that would be really beneficial to the app in the future. I also started the brainstorming session I had planned with users. This was also a very effective meeting because I feel like I got the female input that I was missing from the interview. This meeting was held with one male and female user. A lot of ideas were suggested in this session after I presented a rough layout of the prototype to the two users. They both had positive things to say about the rough prototype, but they also had negative things to say. I will take all their comments on board and put them into effect for when I’m developing the main prototype. I couldn’t meet with my supervisor this month but I plan to meet with him next month so that he can give me feedback on my progress.
7.2.6. February

Student name: Olaoluwa Esho

Programme: BSc (Hons) in Technology Management

Month: February

My Achievements
The month of February I think was my most productive month on the project so far. Although I acknowledge there’s still a long way to go, but I can say that I made great progress in this month. I conducted the requirements workshop in this month. This was another effective elicitation technique because a very important feature of this app was brought up in this meeting. One of the participants suggested that users should also be allowed to search for a movie/TV show through facial recognition as well. I had initially planned for the app to use audio recognition only when I first thought of the idea, but I think this idea of facial recognition could work too. I plan to do extensive research on facial recognition to see if it’s a suitable technology for this app.

Supervisor Meeting:
I met with my supervisor this month on the 2nd of February at 17:00 in NCI on the 3rd floor in the Associate Faculty Room. In this meeting, we discussed the mid-point presentation because we didn’t have a chance to in the month of January due to us having no meeting. He went through what I did wrong during the presentation and also how I can improve on it. I told him I’m currently writing up my final survey and expect to have it ready to accept responses by March.
7.2.7. March

Student name: Olaoluwa Esho

Programme: BSc (Hons) in Technology Management

Month: March

My Achievements
This month was a very busy month for me, because I had two assignments to submit for two different modules by the end of this month. The modules for these assignments were agile project management which was due on the 29th of this month and business process management which was due on the 27th of this month. I also had to start studying for my exams which will be from the 18th of April to the 21st of April. I really didn’t get much project work done in this month, except for finalising my survey so that it will be ready to accept responses. I also created a few more pages for the prototype during this month using the elicitation techniques I have conducted during this project. This is the month where I also created UML use case diagram

Supervisor Meeting:
I met with my supervisor this month on the 23rd of March at 17:00 in NCI on the 3rd floor in the Associate Faculty Room. During this meeting, we discussed the progress I had made so far and we reviewed the survey.
7.2.8. April

Student name: Olaoluwa Esho

Programme: BSc (Hons) in Technology Management

Month: April

My Achievements
When my exams were over, I started to focus fully on the project. I started off with formulating the IEEE requirements specification document. This is an integral part of the project because it contains all the functional and non-functional requirements concerned with the app. I also started designing my poster for the showcase which will be held on the 24th of May 2017. The bulk of my final year project is now complete. All that’s left to do after I submit the project is the presentation that will hold from the 15th of May to the 17th of May and also the project showcase that I mentioned above on the 24th of May. I will aim to complete this document before the due date which is the 10th of May 2017, so that I will have time to print the document and bind it.

Supervisor Meeting:
This supervisor meeting was different because it took place via a phone call on the 5th of April at 15:00. During this meeting, we discussed my progress on the project. My supervisor gave me a guideline to follow for the functional and non-functional requirements in the IEEE requirements specification document and I thought this helped me a lot to understand these areas better.