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Business Information Systems Year 4
07702213
HTML-U
www.tinypages.ie/htmlu2
Technical Report
1 Executive Summary
This project was created to enable beginning web designers get a feel for what HTML and CSS is, and the basics of designing and running a website. The web app encourages users to create a profile and log in, to avail of the entire range of services. The sign up process allows the user to choose how they think they learn best, and angles their profile to suit them, by pointing them towards key places on the site. If a user chooses to do project based learning for example, they can track their progress in their profile. The website was built with HTML and CSS, and uses PHP to interact with an online SQL database.

The full range of features includes:
- ‘Tip of the day’ section on every page
- A code archive section, with semantics of CSS and HTML tags
- User profiles that change depending on the user type
- Projects with progress tracking
- Forum
- Social networking (Facebook/Twitter)

2 Introduction

2.1 Background
This application was built because currently there are no real user friendly sites for complete beginners to web design. Web development is one of the few industries thriving in recession, and, with the new web standards, it is increasingly important to have a good knowledge of the basics of HTML and CSS before you start moving to more complex topics.
The application is web based, and users can log in and out from multiple devices and any location.

HTML-U is designed and created using HTML and CSS. It also uses PHP interacting with an online SQL database to perform the login, signup, project tracking and other processes.

The customer interested in HTML-U is Merrill Goussot, team lead in a Dublin based web Development Company. He is also an entrepreneur and has many websites both commercial and non profit. Merrill was approached in November, but was not able to commit to the project until January.

2.2 Aims
HTML-U aims to create a unique user experience for beginners in web development, following requirements and guidelines set down by the customer. It will be used by beginning web designers of all ages.
2.3 Technologies
As HTML-U is designed to give users a base in web development, it logically followed that the technologies used were those used in web development. The web app is built in HTML using CSS to design it. It also uses PHP interacting with an online SQL database. There are also elements of javascript, such as in the randomly shown ‘tip of the day’ section. It was designed and developed on a PC running Windows 7, using Notepad++, GIMP, Dropbox and others. It currently runs on hosting procured from Register365.

2.4 Structure
Chapter 1 is the executive summary, giving the user a quick overview of the document.

The 2nd chapter outlines the background and aims of the project.

The third chapter describes the technical aspects of the project.

The fourth chapter contains the views of the project.

The fifth chapter contains is filled with the views of the project for the future.

The Sixth chapter contains the bibliography of the all the resources used to complete the project.

The last chapter is the appendix, containing all extras called upon.

3 System

3.1 Requirements

3.1.1 Functional requirements

3.1.2 Requirement 1
System Display

3.1.2.1 Description & Priority
The system should display all features correctly. This feature is necessary for the acceptable functioning parameters of the system and is the highest ranked Functionality Requirement.

3.1.2.2 Requirement Activation
This requirement is essential as the web app is purely GUI based. This requirement is activated as soon as the user fully loads any page of the web app.
3.1.2.3 Technical issues
Multiple CSS designs will have to be created to accommodate all users, as well as accounting for users who don’t display images or have disabilities.

3.1.2.4 Risks
The main risk for this requirement is that not all users will be able to display the site correctly on their particular browser or system.

The most likely solution to this risk will be initial extensive testing, and creation of multiple CSS files to accommodate the most common systems and set ups. If a user is still unable to display the site correctly, they can log feedback with us through a feedback email system.

3.1.2.5 Functional Requirements

3.1.3 Requirement 2
Sign up/Profile creation

3.1.3.1 Description & Priority
Upon loading the app, users are prompted to register for fill features. This requires users entering information such as Name, Username, Password and what type of learning style that they prefer. This is a secondary requirement. Although a log in system and user profiles are integral parts to the marketing of this system, the site can function without them, and it is therefore made secondary.

3.1.3.2 Requirement Activation
The user will choose to sign up to the site. They will enter all their details (username, password etc) which will be logged in a database. Once they have their details logged, they can immediately log into their profile.

3.1.3.3 Technical issues
A database must be created in order to satisfy this requirement the database will store all the users information which includes username, passwords etc.

3.1.3.4 Risks
The user may enter the wrong information accidentally; if this happens the user will be able to edit their details from within their profile.
3.1.3.5 Dependencies with other requirements
None.

3.1.4 Data requirements
Data will be stored in two databases. One database for the user profiles, and one for all the data passed on the Forum.

3.1.5 Requirement
User database

3.1.6 Description & Priority
The site must successfully pass data to the database. This data requirement is of high priority.

3.1.7 User requirements
Users must have an internet connection and a device with a web browser

3.1.8 Usability requirements
Users had to be able to use the site and begin their learning with the most basic knowledge of HTML and CSS.

3.2 Design and Architecture
The system is held on a server, as an extension to the website tinypages.ie. Webspace was given by TinyPages Web Design. The website is split into 3 main categories: HTML, CSS, and FORUM pages. Each category has its own page with many links leading off it. Additionally a signed up user well have a members section, with the above mentioned categories in it. Until a user tries to access a members only area, the site runs purely on HTML and CSS, after that, PHP is used to access a Database held online.
### 3.3 Implementation

On the main site, for the users to sign up, log in, logout, and alter their profile, a database was created to store their information. This data is captured on sign up, and is called by a php file during log in etc. All data stored in the database is encrypted, and the database itself is routinely backed up.

The site works as follows:

**Sign up**
1. The User fills out the signup form and hits submit.
2. The form uses PHP to process the submitted information and checks that the passwords match/all fields have been filled etc.
3. If the submitted data passes this test, username, password and usertype are passed to the database.
4. A few additional columns are added to that user also, (for Project tracking) and are autofilled as NULL.

**Log in**
1. The User fills in a form with their username and password.
2. If both Username and Password match a row in the database, all that users info is pulled, and they are redirected to a ‘member’s page. A cookie is created for the session with a timeout of 6 minutes, should the user remain inactive.
3. The User’s profile is then displayed with a personalised welcome message. The PHP script also checks the user in the database and depending on the usertype originally submitted, a switch statement pulls a HTML page suitable for that usertype.
4. The User’s project progress is also displayed on the page. An IF statement determines that if a project is entered as NULL in the database, it will display as unfinished, however if a user finishes a project the database is updated, and a project completion is displayed.

**Logout**
1. If a user chooses to log out, PHP is used to effectively destroy the cookie held by the computer.

**Projects**
1. If a user completes a project, they can choose to tick it off on the project page. When a user hits ‘submit’ PHP checks the username held by the cookie, and also that the user is still logged in, and updates the database by adding a ‘1’ to the project row for that user.

Another part of the site that stores user information is the Forum. The Forum uses an entirely separate database, and is backed up separately.
3.4 **Graphical User Interface (GUI) Layout**

A Graphical User Interface (GUI) is implemented by HTML-U, and is compatible with peripheral devices like mice and keyboards, as well as touch screen devices such as iPad etc. This allows users of all ages, types, and importantly multiple platforms to access and browse the site as they please.

3.5 **Customer testing**

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<td>Merrill and Sam</td>
<td>Merrill was unhappy with design, both navigation and aesthetics, worked through new design on paper</td>
</tr>
<tr>
<td>13/02/11</td>
<td>Merrill and Sam</td>
<td>Merrill was happy with progress, but wanted me to add the Forum asap</td>
</tr>
<tr>
<td>19/3/11</td>
<td>Merrill and Sam</td>
<td>Merrill was unhappy with progress, and we reviewed time scheme in light of exams</td>
</tr>
<tr>
<td>April</td>
<td>Merrill and Sam</td>
<td>Site was reviewed and redesigned to target only beginners to HTML and CSS</td>
</tr>
<tr>
<td>April</td>
<td>Merrill Andrew and Sam</td>
<td>Site architecture was reviewed by Merrill (with Andrew also) Andrew had doubts about system design and recommended using iFrames.</td>
</tr>
<tr>
<td>May</td>
<td>Colm and Sam</td>
<td>Discussed integration of Social networking, and decided to use only basic networking to begin. Also discussed total aesthetic redesign.</td>
</tr>
<tr>
<td>May</td>
<td>Merrill and Sam</td>
<td>Final meeting. Merrill approved of redesign, and progress. Forum was planned.</td>
</tr>
</tbody>
</table>

3.6 **Evaluation**

An online survey was used to evaluate HTML-U, results are as follows.
*results rounded up to integers
*survey undertaken by 42 unique users

1. 94% of people found the site Great or Good to navigate through.
2. 60% of people said that they would find this site useful
3. Users ranked User profiles, the Forum and Projects as the most important aspects of the site to them.
4. When users were asked if they would make any changes, the results were overwhelmingly in favour of more information being added.

The project was also evaluated by web developers from Facebook (independently from their work at FB), and the customer Merrill Goussot and all three echoed the idea of more features being added, while agreeing that functionality was fine. Many thanks to Andrew, Colm and Merrill for their time, as well as Dietmar and Orla for their input.
3.7 Discussions

From discussions with Orla Lahart, I gathered that at the very least a log in system would have to be implemented to make the project complex enough to be saleable.

Discussion with Dietmar Janetko lead to the idea of a Chat Bot as an FAQ system, unfortunately time constraints have lead to this not being implemented, although it is planned for the final project.

From discussion with Merrill I built the requirement spec, and planned a marketing and ad sales campaign for future builds.

The surveys lead to a focus on the profile system and forum.

4 Conclusions

HTML-U was both a challenging and rewarding project. As I have no PHP experience, and only basic knowledge of SQL I found the work at times to be almost insurmountable, however, keeping at it and simplifying what seemed like complex processes was the key to getting it done.

I feel that HTML-U is a very valid and useful product, and I will definitely be putting more time and improvements into it in the next few months. I feel that a fully functioning HTML-U would be a widely used product for web developers everywhere.

A number of NCI students have expressed an interest in using the site to improve or even restart their learning of web development and I will be remaining in contact with these students and using them as a testing group and developing the future site around their needs.

5 Further development or research

I plan to add a lot to HTML in the future. Some of the improvements are:

- More projects
- More extensive code archive
- Examples for code segments
- Video tutorials (members only)
- Facebook app
6 Bibliography


Murphy C & Perrson N (2007) *HTML and CSS Web Standards Solutions*. UK. All pages

7 Appendix

7.1 Project Proposal

Project Proposal

**HTML-U**

Sam Cogan
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cogansam@gmail.com
Objectives

My objective is to create an interactive web application where people beginning their education in web development can learn the basics of web development, the best way to implement their skills, and all the tools they will need to begin the process.

I view my market as any institution that offers any sort of web design course that involves HTML and/or CSS. I feel that there is a need to create an application that caters to all teaching and learning styles that can both act as a supplement to a lecturer’s material or a source for all their HTML and CSS teaching needs. I plan to have both a useful free and open source aspect to the platform and a “premium account” aspect where lecturers can assess student’s needs and address them with readymade tutorials and project work.

Although I currently have interest from a Technical Analyst of Platform Operations, who has experience working with Facebook Ireland and Europe, I hope to target lecturers that feel that there is a need to develop such a system, and would be interested in guiding and supporting the project.

I hope to also develop interest in the application by creating additional Facebook applications to test users learning abilities and CSS and HTML knowledge.

In the long run I see this application becoming a service software package that I will aim at 2nd and 3rd level education systems, as well as those looking to start a career in web design.

My web application will consist of a few main elements

- A comprehensive archive of both supported and unsupported HTML and CSS codes, what browsers offer support, and the semantics of implementing the code.
- Useful code segments for more advanced users, so as they can quickly implement code.
- Tutorials and sporadic testing to ensure that users know the right way to code to current web standards.
- A tools section for those starting out with a comprehensive list of the software/hardware needed for a user to get their site online.
- A forum so that people can ask and answer more specific questions on HTML and CSS.
- A chatbot written into the main page where people can ask FAQ. I hope to develop the chatbot to a level where users can both hold a conversation and have the answers routed to their email.
- Later updates could see a premium members section, where lecturers can sign up to an account through PayPal, and receive lesson plans.
- Later updates could also see a search function added so as people can easily search for specific terms within the site.
Background

My interest in web design started when I was still in second level education, merely as a hobby. By the time I entered third level education, I could create a basic website purely in HTML. Up until this point I had never used CSS, or even knew what it was. When I began to learn about CSS in college, I found it quite difficult to pick up. Despite being no harder and no less interesting than HTML, I found it boring, repetitive and hard to learn. Despite having been one of the top in the class when we had covered HTML, whereas other people had struggled, I now found myself at the bottom, and struggling. It wasn’t until my third year in college that I understood why.

During my work experience, I was given the task of creating many websites, html emails, banners etc in HTML. As a result I was forced to learn CSS, and learn it on my own. My method was to look up forums/tutorials and code segments online. All through Google and all on my own. I learned more in my first week, than I had the three previous years in college. However, in contrast, my colleague that had joined with me, found this approach quite hard, and things would only really sink in when someone showed him, or told him how to do it. I realised that, although the two approaches yielded different results, neither approach was in any way better. I realised that there were many approaches to learning, and I wished that there was a system that would address this. That was when my idea for this project came about.

Although I realised that using two or three teaching methods in any sort of lecture or education system was not possible or feasible, I saw no reason as to why there shouldn’t be an online resource where you could choose the way to learn that suits you best, and learn at your own pace, as a standalone system, and/or a supplement to lectures. And so, I began to develop the idea of HTML-U, a series of tutorials, lectures and code archives, that help the user learn, at their own pace, in their own way. I feel that this application will address the need to be able to offer different materials to different students, some that may have difficulties learning in a widely used way.

Technical Approach

My project will run through a 6 step approach as such:

Requirement gathering and analysis

- During the first stage of the process I shall find a customer interested in supporting and guiding the project.
• I will look for expert analysis from two or more lecturers and experts on the subjects of artificial intelligence, education, design and marketing.

• My target user group will be researched by means of focus groups and online surveys. My key data will be taken from those with previous experience with HTML and CSS on all levels.

• Other similar projects will be looked into, so as to identify how to improve and differ so as to develop a niche gap in the market.

System Design

• During this process the application will be critically assessed, and from there on the system design will be prepared.

• Both the hardware/software/user requirements will be cemented and the system architecture will be laid down.

Implementation

• This is where my actual coding will begin. I shall break the project up into mini projects or modules (i.e. aesthetic design, search function etc.)

• Once each unit is created and tested on its own and once these meet specification standards the next step will commence.

Testing

• The modules will now be integrated into one cohesive project.

• This will then be extensively tested by both a testing group from my target market and myself.

Deployment

• Once the testing phase is over, the application will be delivered to the customer.

Maintenance
The site will undergo scheduled maintenance, to ensure that the best learning techniques are implemented, as well as making sure that all code is up to date and supported, and as HTML5 develops, an improved section will be added.

- General system maintenance such as backup of the forum and databases will occur.
- Problems that were not discovered during the development cycle will be logged and fixed as they happen.

**Special resources required**

**Books:**

- HTML and CSS Web Standards Solutions - Christopher Murphy, Nicklas Persson

- HTML Dog: The Best-Practice Guide to XHTML and CSS - Patrick Griffiths

- Head First HTML with CSS & XHTML - Eric T Freeman, Elizabeth T Freeman

- FBML Essentials: Facebook Markup Language Fundamentals - Jesse Stay

- Learning Styles
**Software:**
Text editor (Notepad ++)
Ftp software (Win Scp)
Webspace (domain name/hosting)
Chatbot software
GIMP (Picture editing suite)
XAMP
PhpBB Forum software:

**Hardware:**
Internet enabled PC
Wacom Graphics Tablet

**Technical Details**

The project will be written in HTML with CSS fully supporting it. There will be elements of PHP also, both in the chatbot, and in the web application itself, in the form of mini quizzes/tutorials. There will be a “Tips” toolbar on each page. These will run off javascript and will be randomly generated. Another language to be used is AIML. AIML will be used for coding the chat bot. The project will be tested and worked on by uploading to a webspace.

A main part of the site will be its login system, and user profiles. Users will be able to enter information on their profiles, and have it displayed, and their information will be held on a database. The form for the login system will use Html,Css,Php, MySql and JQuery.

**Main languages used:**
- Html
- Css
- Php
- MySql
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Consultation 1
Dietmar Janetzko.

I consulted Dietmar on my plans to build an educational web application, and discussed the fact that I wanted to integrate a chatbot into the main page of my website, as an alternate FAQ section. He advised me that a chatbot that routes its answers to a user's email would be a very interesting and useful way of implementing a chatbot, and that users would benefit greatly from this system.

Consultation 2
Orla Lahart
I consulted Orla on my plans to use a method of identifying how a user learns, and then pointing them to a specific section of the site based on those results. She advised me that a login system with profiles that store user information would be extremely useful to the user, as they would not have to take a quiz every time they entered the site. She advised me to use MySQL and PHP to build the script and to use the VARK system or similar existing system to calculate how users learn.

_________Sam Cogan 23/09/10_________
Signature of student and date

7.2 Requirement Specification

Title Requirements Specification (RS)

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### Related Documents

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      4.1.2 Description & Priority .............................................................................................. Error! Bookmark not defined.
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   4.3 Functional requirements ................................................................................................. 23
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Introduction

Purpose
The purpose of this document is to set out the requirements for the development of a web based application with the purpose of teaching HTML and CSS. The intended customers are 2nd and 3rd level lecturers for use as both a supplemental reference system, and as a system that they can point their students to as a standalone learning system.

Project Scope
The scope of the project is to develop a fully functioning HTML and CSS educational system. The system shall have a number of main features such as:

- An initial test to determine the user’s specific learning style.
- A custom profile that takes into account the user’s learning style and creates a custom profile they can log into, which holds their details and learning style.
- Their profile points them to information that suits their learning style, but they can access all areas of the site if needed.
- Other main features include an extensive archive of both HTML and CSS code, an archive of professionally designed tutorials, and a set of immersive and useful projects and code segments.

There will also be a number of secondary features such as:

- A chat bot built into every page, as an alternate and personable method of creating an FAQ.
- A “tips” toolbar on every page, which will be randomly generated and show a large number of useful tips on all things HTML and CSS.
- A forum where users can ask each other more specialized questions and share advice and tips.
- A facebook app to promote the system and attract a larger fanbase.

John Smyth was involved in discussions with John Ryan from AN Company Ltd. To elicit the following requirements

This section also details any constraints that were placed upon the requirements elicitation process, such as schedules, costs, or the software engineering environment used to develop requirements.

Definitions, Acronyms, and Abbreviations

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<td>FB</td>
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<tr>
<td>ES</td>
<td>Educational System</td>
</tr>
<tr>
<td>HTML</td>
<td>Hypertext Markup Language</td>
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User requirements definition
Having approached one of the potential customers I have compiled a list of user requirements as such:

- Secure registration and log in facility
- Profile creation and editing function
- Profile integrated user type detection
- HTML/CSS codebase, tutorials and projects
- Forum
- Interactive FAQ section
- Difficulty categories

Interface requirements
To the user, HTML-U will be completely GUI based. However at the back end, changes and updates will be made through both HTML and CSS as well as PHP interacting with a MySql database

Description & Priority
User interaction with GUI interface: Priority 1
Database interaction with PHP and profiles: Priority 2
Database interaction is a 2nd priority as the database will occasionally need maintenance and will have to be taken down without affecting the general workings of the site.

Functional requirements

Requirement 1 <System Display>

Description & Priority
The system should display all features correctly. This feature is necessary for the acceptable functioning parameters of the system and is the highest ranked Functionality Requirement.
**Requirement Activation**

The user should be able to see the website exactly the way it was intended. All items and images should be rendered correctly and in place.

**Technical issues**

Multiple CSS designs will have to be created to accommodate all users, as well as accounting for users who don’t display images or have disabilities.

**Risks**

The main risk for this requirement is that not all users will be able to display the site correctly on their particular browser or system.

The most likely solution to this risk will be initial extensive testing, and creation of multiple CSS files to accommodate the most common systems and set ups. If a user is still unable to display the site correctly, they can log feedback with us through a feedback email system.

**Functional Requirements**

*Use Case 1 .........<See appendix 1.0>*

**Requirement 1 <Log in/sign up system>**

**Description & Priority**

This is a secondary requirement. Although a log in system and user profiles are integral parts to the marketing of this system, the site can function without them, and it is therefore made secondary.

**Requirement Activation**

The user will choose to sign up to the site. They will enter all their details (username password etc) which will be logged in a database. Once they have their details logged, they can immediately log into their profile.

**Technical issues**

To stay logged in the user must have cookies enabled. To ensure that the user does so, a reminder will be written into the log in script.

**Risks**

Should the database go down due to a hosting error, or hacking/corruption, the log in system will be unusable. To prevent this, secure PHP is used and backups of the database will be made regularly.
Dependencies with other requirements
This log in system depends on the System Display requirement, and also depends on the database. If the database is down or corrupted the user will NOT be able to log in. (see Risks 2.2.2.4)

Functional Requirements
Use Case 2 ..........<See appendix 2>

Documentation requirements
There should be two types of documentation for HTML-U.

- User Docs: The user will be provided with an FAQ in the form of a chatbot, and also a downloadable text based FAQ if they so need.
- Admin Docs: As the system, and the forum grows, moderators and administrators will have to be added, and therefore documentation of all aspects of the code will have to be created. All code must be thoroughly commented and key lines will be highlighted in separate documentation.

Requirement 1 <User FAQ>
Description & Priority
User documentation: Not of great priority. A feature that can be added later in the project.

Data requirements
Data will be stored in two databases. One database for the user profiles, and one for all the data passed on the Forum.

Requirement 1 <User database>
Description & Priority
This data requirement is of high priority.

Non-Functional Requirements
Specifies any other particular non-functional attributes required by the system. Examples are provided below. Remove the requirement headings that are not appropriate to your project.

Availability requirement
The database must be available to the administrators at all times
Recover requirement
If the database gets hacked or is corrupted, backups will be held in secure locations and servers.

Security requirement
All PHP will be securely coded and user passwords and data will be encrypted in Md5 and stored securely.

Maintainability requirement
The database will be maintained on a regular basis. Pruning, security checks and backups will be performed weekly.

System models
This section presents a more detailed description of the system model. For example DFD, ERD, UC Model etc.

System evolution
The system will have to evolve in two main ways.

- As HTML 5 and its later versions become more widespread, as well as new releases and revisions of CSS and accompanying code.
- As new hardware and software get released and come into widespread use, (ie new browsers, graphics cards, screen resolutions) the site will have to be redesigned and changed.

Appendices

Use case 1
Use case
Sign up process
Scope
The scope of this use case is to allow a user to sign up to the web application
Description
This use case describes the process of signing up to HTML-U, and the database interactions that follow.
Use Case Diagram
See Appendix 1.
Flow Description
Precondition
The user accesses the application
Activation
This use case starts when an <Actor> chooses to select the ‘Sign up’ link on the application
Main flow
1. The system displays a sign up form.
2. The User enters their details, and verifies password.
3. The system logs the user’s details in a database.

Alternate flow
A1: <User incorrectly verifies password>
1. The User enters their password incorrectly into the password verification form.
2. The System notifies the User of their error, and returns them to the sign up page.
3. The use case continues at position 1 of the main flow

Termination
The system encrypts and logs the user’s details.

Post condition
The user is presented with a ‘log in’ screen.

Use case 1
Use case
Log in
Scope
The scope of this use case is to allow a user to log in to their profile
Description
This use case describes the process of logging in to HTML-U, and the database interactions that follow.
Use Case Diagram
See Appendix 2.
Flow Description
Precondition
The user accesses the application
Activation
This use case starts when a User chooses to select the ‘Log in’ link on the application
Main flow
1. The system displays a log in page
2. The user enters their username and password
3. The System verifies these details from the database.

**Alternate flow**
A1: <User incorrectly enters their information>
4. The User enters their details incorrectly.
5. The System notifies the User of their error, and returns them to the log in page.
6. The use case continues at position 1 of the main flow

**Termination**
The System displays the user’s profile.

**Post condition**
The user is presented with a ‘log in’ screen.

**Use case diagrams**
Appendix 1
Use case
Sign up process

```
User  -->  Register  -->  database
```

Appendix 2
Use case
Log in process
7.3 Monthly log book

Software Project:
HTML-U
Reflective Journal Part 2.
Scope: October 29th – November 26th
Milestone attempted: Working Log in system.
    Working iFrame system

Status: Complete

Introduction
I spent the last few weeks perfecting the log in system to include sessions, perfected the log out system, and designed how user profiles would work for individuals.

My first step was to completely restart my log in script. My previous log in script had to many errors to bug test, and so, I began again, working through each line of code and making sure it was working before moving onto the next.
When my log in system was finished I had some students ‘alpha’ test it for bugs. This yielded one massive error which I had overlooked, in that logging out and then pressing the back button on browsers would return you to your profile. Not only this, but any further navigation through the user profile would result in an error message from the PHP.

After several hours trawling the internet and my code to get clues to why this error was happening, I stripped back the HTML from the PHP files, and found that it was the HTML causing a problem. I then realised that the HTML and PHP must be completely separate in the code for it to work. I spent several hours trying to figure out a way of having both HTML and PHP displaying on a page, and then came up with the solution: iFrames. iFrames are perfect, as they are a way of displaying a page within a page. Using Div’s with iFrames in them, and some complex CSS, I was able to quickly implement this fix and now the log in system works perfectly.

I finished this milestone before schedule and so was able to move on to looking at extras, like profile customisation etc.

**Conclusion**

In conclusion, I think that there was 1 main areas that hindered my success in achieving this milestone; however, I had already implemented the ‘alpha testing’ system, so this error was quickly found and fixed.

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<thead>
<tr>
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<th>Description</th>
<th>Fix</th>
</tr>
</thead>
<tbody>
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</tr>
<tr>
<td></td>
<td></td>
<td><strong>NB:</strong> Alpha testing greatly increased the speed in which this problem was found. Incorporate into testing protocol.</td>
</tr>
</tbody>
</table>

**Software Project:**

**HTML-U**

**Reflective Journal**

**Part 2**
Reflective Journal Part 2.
Scope: October 29th – November 26th
Milestone attempted: Working Log in system.

Working iFrame system

Status: Complete

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**Software Project:**

**HTML-U**

**Reflective Journal**

**Part 7**

*Sam Cogan*

*X07702213*
Reflective Journal Part 7.
Scope: March 25th – April 29th
Milestone attempted: Forum Implementation
  Facebook/Twitter integration
  Customer feedback

Status: Complete

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Overview
These last few weeks have been busy, as Facebook have again changed their policies on apps, pages
and like buttons. However, I was able to recode the social networking stuff quite easily, and integrate them nicely with
the look of the app. I also reinstalled and recoded the look and feel of the forum, as my files became corrupted, and my
backups oddly did not work.
My last task was to meet up with my customer, Merill Goussot (who is a blogger, web developer and
works with online advertising in his day to day job.) He seemed quite pleased with the progress, but suggested that we strip back the idea to target only
beginners in HTML and CSS. He expressed an interest in helping new developers not only learn code,
but have a good understanding of what it is to develop websites for clients, and the best practice of
doing so.

Conclusion
The meeting with Merill I feel was left off too long, due to time constraints on either side. However this
could have been fixed using Skype or free meeting software to discuss and showcase the project. This is
something I will improve on in future and I hope it will lead to a much improved final product
### 7.4 Other material Used

A survey was carried out to see what users thought of the site. As shown below:

#### HTML-U Usability

<table>
<thead>
<tr>
<th></th>
<th>Great</th>
<th>Good</th>
<th>Ok</th>
<th>Bad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navigation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information given</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Do you think that you would find this site useful?**

- [ ] Yes
- [ ] No
- [ ] Unsure

**Do you like the User profile feature? Why/Why not?**

- [ ] Yes
- [ ] No
- [ ] Haven't used it

**Why?**

_With regards to a site such as HTML-U, how important are the following features to you?_

<table>
<thead>
<tr>
<th>Feature</th>
<th>Very important</th>
<th>Important</th>
<th>Not very important</th>
<th>Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>User profiles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code segments and explanation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very important</td>
<td>Important</td>
<td>Not very important</td>
<td>Unimportant</td>
</tr>
<tr>
<td>----------------------</td>
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<td>--------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Projects</td>
<td></td>
<td></td>
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<tr>
<td>Progress tracking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examples</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social networking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**What would you change about the HTML-U site?**