## Software Development Life cycle Project Plan

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#### 1 Introduction

#### 1.1 Purpose of this Document

This is the user interface specification. This document is intended to show how the system will look and feel. It will also show the risk assessment and the Gantt chart.

#### 1.2 Scope

This document will show how the user will be able to interact with the system through use case diagrams. How the system will look through user interface design. It will also list the risks that could possibly arise and what people in the groups primary and secondary roles are. This will be shown in the risk assessment. There will also be a example Gantt chart that will list people in the group, their task and time frame for which it is intended to be completed.

### 1.3 Objectives

The objective of this document is to design the interface and usability of the system for the monster mash game. The areas covered by this plan are:

Start bullet points

- Overview of system
- Use Cases
- User Interface mock ups
- Gantt Chart
- Risk Analysis

#### 2 Overview

This project requires the group to be able to design and create a web based application that allows the users to socially interact with one another. Monster Mash (The name of the social web application) will allow the user to create an online pro

le and once this is completed, the application will give each new user their own monster, of which they can use to challenge other users of the application to a battle, and depending on the outcome (win or lose) will award you with points and will alter the statistics of your monster. To commence a battle with another user, its required that they are both "Friends" with one other on the web application,

like many other social networking sites, this will be done by one user sending a friend request, and the other either accepting or rejecting. Aside from battling each others monsters, the game should be able to include other features such as breeding, so that users can create stronger monsters, and also a high scores page, on which friends can check to see who has the best overall score out of each of them.

### 3 Deployment

### 3.1 Overview

We have decided to use a small enterprise style system, which will be hosted on Chris Lloyds VPS (virtual private server). While this would normally not be hosted on a single server (due to security), it does allow almost all of the bene

ts such as it being live(non-local), 99.9 experience with how to deal with real world solutions that we may come across in our future lines of work.

#### 3.2 Hosting

The hosting has been sorted by Chris Lloyd; he has allowed the group to use his VPS which he has installed Apache http server, MySQL database and a tomcat. Chris Lloyd has also purchased the domain monstermashgame.co.uk to which he has added an A-record to the VPSs IP.

#### 3.3 Apache HTTP

Apache is used to handle http requests; this will mainly involve sending html pages that has been requested. Apache is the worlds most widely used http server and is used as the standard in industry.

#### 3.4 MySQL

MySQL, while not being used at the higher end of the corporate market (held by Oracle), it does allow us to use an enterprise like database system, as it is quite commonly used for small to medium sized business and is often used on small scale web hosting.

#### 3.5 TomCat

Tomcat as a project, is developed by the Apache foundation. Tomcat is widely deployed as a java application server, all though through the various configurations

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it can be used to make a mass distributed java cluster. This is to say that it is possible to run a single java application across a distributed processing cluster.

#### 3.6 server Side Conclusion

While there is other software out there that may do a better job, we found that by sticking to the widely used software, implementation and application, we would find a good, well rounded base knowledge in the area of server side web applications.

### 4 Methodology

Although the structure of the hand in documents leads us to waterfall, we shall aim to do incremental within this. The advantages are: Start bullet points

- Easier management
- Can get user feedback earlier
- Can avoid crises by be alerted to problems earlier
- Can respond easier to changing user requirements
- Earlier exchange of function laity

The disadvantages are:

- Can be harder to manage, with more steps and crucial decencies and overall progress monitoring
- Version and configuration control is crucial and can be complex

#### 5 Use Case

This section will highlight the functional requirements that were defined in the requirement pdf.

#### 5.1 Welcome Page

Functional Requirements- FR1 - Server-based Authentication FR6 - Client Options FR7 - Start-up of software in browser

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### 5.2 Main profile page

Functional Requirements- FR8 - Game Display In Browser FR10 - Fight Notifications

### 5.3 Friends Page

Functional Requirements- FR2 - Server Friends List FR5 - Server-server communication FR6 - Client Options FR9 - Friend Matching FR11- Friends Rich List

#### 5.4 Add Friends

Functional Requirements- FR5 - Server-server communication FR6 - Client Options FR9 - Friend Matching

### 5.5 Breeding

Functional Requirements- FR3 - Server Monster List FR5 - Server-server communication FR6 - Client Options FR8 - Game Display In Browser

### 5.6 Breeding Results

Functional Requirements- FR5 - Server-server communication FR6 - Client Options FR8 - Game Display In Browser

#### 5.7 Battle Screen

Functional Requirements- FR4 - Server Monster mash management FR5 - Server-server communication FR6 - Client Options FR8 - Game Display In Browser

### 5.8 Battle Results Page

Functional Requirements- FR3 - Server Monster List FR8 - Game display in browser FR10 - Fight Notifications

#### 5.9 Help Page

### 5.10 Notifications Page

### 6 User Interface Design

### 6.1 Login Screen(fig2)

This is the basic design of the page the user will

rst encounter when they want to either create an account or log in if they already have an account. Both the Login button and the Create Account button (if filled in correctly) will take the user to their profile page. This is the only page in which the user is not signed into their account. Once logged in, the user will be directed to Figure 3.

### 6.2 Profile page(fig3)

This is the basic design for the pro

le page of our project, this will be the page the login screen takes you each time you log in. It is from here, you (the user) will be able to select each of your monsters to either battle or breed with a friends monster. There are other features that are accessible from this page, such as the Help page and the Manage Friends page, which can be seen in the top right corner of the screen, however these are also accessible from other pages aside from the Pro

le page, so we will just focus on the Breeding and Battle a Friend page. On the right hand side of the page, the stats for the monster you have selected will be shown, this will be done by clicking or possibly hovering over the monster with the mouse. You select which monster you want to breed by clicking on the corresponding breeding button. Located underneath the monster you wish to select. Once you have selected your monster you wish to breed. You are taken to

gure 4.

#### 6.3 Breeding Page(fig 4)

The monster that you selected for breeding from the previous page will be shown on the left hand side of the screen, on the right hand side of the screen are all the monsters that your friends own, the idea here being that you have to select one of your friends monsters to breed with the monster you have, seeing that you are the one who bene ts from the breeding process (the one being requested to be bred with does not gain a monster) the user must enter an amount of points, or cash into the box located on the left hand side of the page (the one with the number 3 in it). It is then up to the other player to either accept or reject this oer, if it is accepted, the breeding takes place and the points are transacted from one users account into the others. The player who initiated the breeding process then gains a monster. Returning to Figure 3, if you want to select a monster to battle another friends monster, as with breeding, simply select the corresponding button underneath the monster of your choice, you will then be taken to Figure 5.

### 6.4 Battle Selection Screen(fig 5)

Similar to the breeding page, this requires the user to select one of their friends monsters to challenge, once they have selected, the user simply presses the con

rm and

ght button, and the request is sent. Both pending battle and breeding requests can be viewed in the Manage Friends page. Incoming requests will appear on your notifications.

### 6.5 Battle Page(fig 6)

It should be noted that this page will only be viewed by the user accepting the battle request. Once the user has accepted a battle request o their friend, they will be redirected to this page. This is an example of a battle taking place between two monsters. The user (so the one who accepted the battle request) can watch the battle unfold. The text in the middle constantly updates, telling the user how much damage each monster deals to each other. The green bar next to each of the monsters is their health bar, this gradually decreases as the battle progresses. The

rst monster to lose all of its life it declared the loser. After the battle, the user is directed back to the Pro

le page (Figure 3), the other user that wasnt present for the

ght receives a message in their notifications telling them how the fight unfolded. Moving back to Figure 3, if the Help button, located in the top right hand corner is selected, Figure 7 should appear.

### 6.6 The Help Page(fig 7)

A simple page in design and implementation. This page will tell the user all they need to know about how to user the application, including things such as how to battle, how to breed and how to add friends.

### 6.7 Friend Management Page(fig 8)

The Manage Friends page can be accessed from most of the web pages, the button that directs to it is located in the top right hand corner of the screen. The Manage Friends page holds many functions. From here you are able to cancel pending requests to either battle or breed with another friends monster, send per-sonal messages to your friends, and new friends to your list and also check who has the top score overall out of all your friends. To log out of Monster Mash, simple click the Log Out button which is found on most of the pages to the top right hand corner. This will take you to back to Figure 1.

#### 7 Gantt chart

This is the Gantt chart that is used for assigning tasks and a time period that those tasks should be

nished by. The image below is merely an example as the actual Gantt chart is constantly changing. Can be seen online at Gantt Chart

#### 8 Risk Assessment

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# REFERENCES

[1] N/A

# DOCUMENT HISTORY

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1.0	N/A	2012-10-31	Initial creation	CPM4
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1.2	N/A	2012-12-5	Updated config ref and added other documents	CPM4
1.3	N/A	2012-12-6	Added missing data and fixed few mistakes	CPM4