

## **Software Development Plan (SDP)**

### **4.1 Plan Introduction**

This Software Development Plan provides the details of the planned development for the *Unicat Escape* application, which will be a game that will be available for users across multiple platforms for their preference.

#### **4.1.1 Project Deliverables**

In terms of what will be provided to the customer, they are going to receive one final application that will be ready for gameplay and will not require any other documentation for use. Being a game application that will be available across multiple platforms, there is no need to give the customer documentation and deliverables for use, as the game will be self explanatory and will stand on its own as a whole.

### **4.2 Project Resources**

In terms of the resources for this project, I have been the one and only person who is in charge of the project and all of the sections and subsections that are part of this project. There are three main sections that are responsible for the final project. Those three parts are the application planning, the actual development, and the graphics.

#### **4.2.1 Hardware Resources**

The hardware resources that are required for this project are going to be computers, laptops, tablets, and smartphones, since the application will be available across all platforms and therefore comes down to preference. For my demonstration, I will be using only two of those platforms, a laptop and a smartphone. The reason for this is that a desktop computer, a laptop, and a tablet are going to all be similar in terms of the sizing and access of the application. However, a smartphone is the only one that is different in terms of accessing the application and sizing dimensions. Though they can all vary in specifications, the only real requirement is that they either have Internet access or have an App Store from where the game will be able to be downloaded from.

#### **4.2.2 Software Resources**

There are many software resources that are used in the completion of this application. To begin with, and most importantly, I am using phaser.io, which is a JavaScript framework that allows for the creation of HTML and JavaScript games that are playable online. From there, I am also using Sublime Text 2, Intel XDX, both for code development and coding purposes, Cocoon.js for packaging the application into Android and iOS compatible formats, Python for local server testing purposes, and Firebase Database for storing user high scores. For the graphics portion of the project, I am using Adobe Illustrator and Graphic, which is an application for the iPad which is very similar to Adobe Illustrator, however, being on the iPad, it allows for free-hand drawing that.

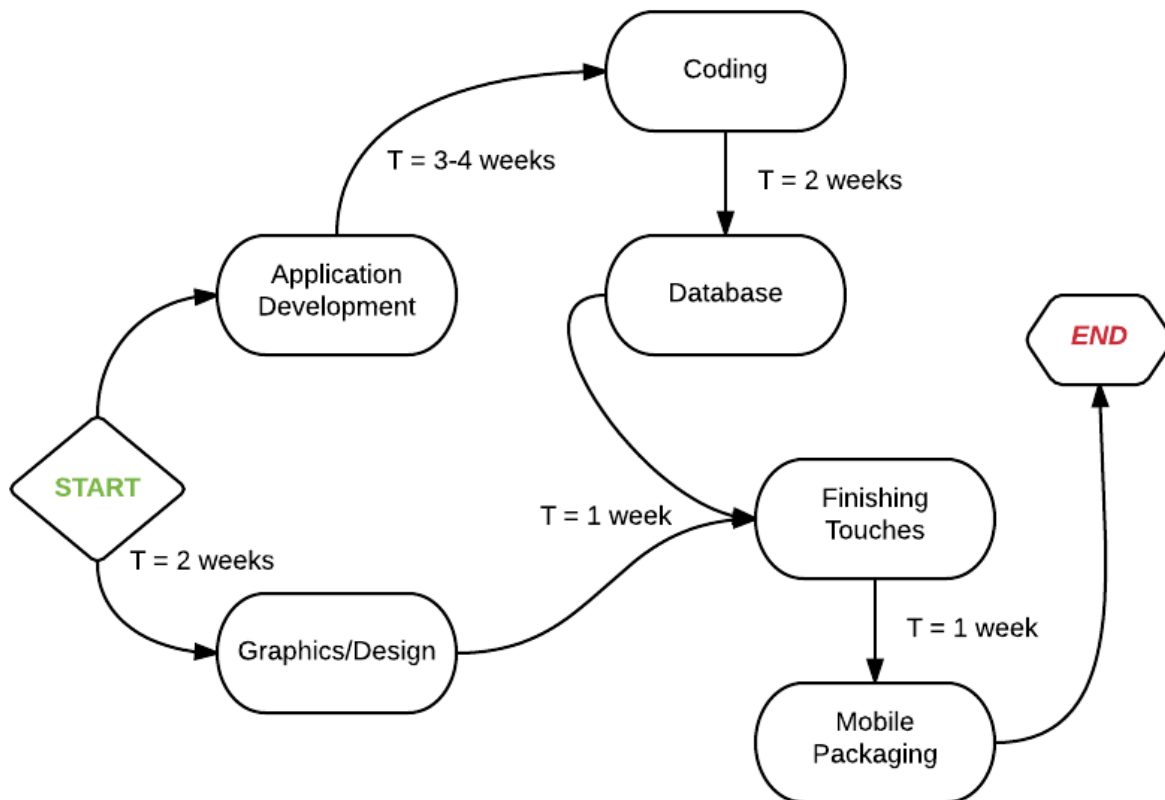
### 4.3 Project Organization

Being an individual project, there are two main sections in which the project was divided into and worked on separately. The two main sections are the application development and the graphics/design work. The application development part was where I first started and my plan for that part of the project was to take it slowly and begin small, making sure that every component that I was developing was working correctly before moving on to the next development/part of the application. As for the graphics portion, I looked over many different images across the Internet for ideas and inspirations and made many sketches, until I finally figured out the final design that I wanted for my game, which was a unicorn cat theme from one is trying to escape from humans that are trying to capture it because of its rareness.

### 4.4 Project Schedule

This section provides schedule information for the *Unicat Escape* project.

#### 4.4.1 PERT / GANTT Chart



#### **4.4.2 Task / Resource Table**

These tasks and resources will be divided into two parts, Functional Application Development and Graphics/Design Work

##### **4.4.2.1 Functional Application Development**

Since this is an individual project, I will be the only one in charge of this section. The hardware that will be used will be my iMac, for coding and testing purposes, and also my iPad and iPhone for testing purposes as well, ensuring that the application works across multiple platform sizing and types. The software that is used in this section will be

##### **4.4.2.2 Graphics/Design Work**

Since this is an individual project, I will be the only one in charge of this section. The hardware that is being used will be my iMac for Adobe Illustrator and also my iPad Pro which will be used for the Graphic application, that is also used for creating some of the graphics used in the application. Therefore, as previously mentioned, the software that is being used is Adobe Illustrator and the Graphic App for iOS.