# Gamification

Team: Formed Fiction

Student members: Wai Fong, Wai Lok Cheng, Zach

Moore, Sung Su Park, Casey Riehle

Mentor: Chris Cain

Professor: Behrooz Shirazi

Course: CptS 421/423 Spring and Fall 2017

Submitted: 9/29/2017

Document 5: Test and Validation Plans for Beta Prototype

### **Description of Beta Prototype**

Our beta prototype game has most of its features created and implemented. The game is also fully integrated so that each minigame has an interaction with the incremental game. It has been made into an executable file which will be sent to beta testers by Chris Cain. The game currently saves information about the player on their computer. We are working on getting the game to save and load from a server for the final product.

It still requires a lot of balancing to be done and some bug fixes. We are also planning on working on another minigame if we have the time after debugging and balancing our current game.

#### **Scenarios for Tests**

During the creation of the game, we have been naturally performing unit testing throughout. We have also each played through our individual games multiple times.

Each of our team members will start playing the whole game from the beginning. Since all planned features are implemented already, we will have to find out any bugs and improvements. Since we have been running the game on multiple machines, we have found no platform related issues.

We have had friends play through our games a bit as well. Our game will be sent out by Chris to testers in the beginning of October. They will be playing the fully integrated game and give us feedback on it.

#### **Data Collection Plans**

We are planning to pass out the prototype to other classes' students to test out the functionality. The targets will be on lower level courses student, where they will have more free time to test and try out our prototype. They will be providing feedback and ideas for us to improve on our prototype.

We are using iterative testing because it is the best way to receive feedbacks, opinions, and ideas from the user perspectives, therefore we can use them to enhance our product quality. The advantage of getting feedback from the user point of views are we will be able to make changes and not be stuck with tunnel vision on the software designer point of view.

The information from those users will help us realize what is missing or needing improvement, and do a fix on our side. Then after getting the feedback and fixing our prototype, we will be sending the improved version of the product to our test participants to continue on our testing phase.

By the nature of iterative testing, we will be continuously getting feedback from the test participants, and we will be able to keep making changes to improve on our product.

## **Analysis, Modeling, and Implementation/Simulation Plans**

After testing our game with a wide audience we will have good feedback to work on. Through this, we will analyze what needs to be done and update our games according to feedback from our mentor Chris and the small testing team that he hands our game off to. When this is complete, we will look ahead to our implementation plan. With our beta test, the game is saved locally on a user's machine. We would like to change this to be server based saving and loading. We will work to have the saving and loading on Chris' EECS server to make data storage easier. Once the game data is stored on the server, it will be ready for anyone to do final testing of the game. After this our game will be deployed to a class to gather data for Chris's research.