

# Gamification

Team: Formed Fiction

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Document 2: Technical Specifications

### Updated Project Description:

The goal of Gamification is to create a fun and interactive game for students to play and use it as motivation to attend classes and get better grades. The game is not an educational game but rather utilizes student effort in their classes to further progress in the game. We hope to create a game interactive and fun enough such that students will be more motivated to do better in their class work so they can play more of the game. Our client wants us to create four separate minigames that is part of a larger incremental type game. The minigames will be separate from each other and only connected to the incremental game. The four minigames will be based on the gamer types: seeker, conqueror, survivor, and mastermind. The seeker game will be a story based game where the player goes around exploring a world and collecting items that can be converted to currency in the incremental game. The conqueror game will be a shooter based game where the player flies a ship to fight monsters while dodging a large amount of attacks and may have a multiplayer functionality. The survivor game has the player go through a maze while dodging monsters and acquiring food to live. The mastermind game will have multiple puzzle games which the players solve and are rewarded for solving the puzzles.

### Complete List of Client and Stakeholder Requirements and Needs:

The incremental game is a progress based game where the player levels up and unlocks features as they play the game. This progress continues even if the player is not playing the game albeit at a slower pace. The other four minigames are tailored towards certain gamer types. The students will partake in a survey that will identify what type of gamer they are and by utilizing that information, we will guide them towards one of the minigames they should play but are not restricted to playing. These minigames will be tied to the progress made in the incremental game. To play the minigames, the student must acquire game time from attending classes and either participating in clicker quizzes or a code given by the professor.

### Broader Impacts Considerations:

To be able to acknowledge student based effort we require the assistance from professors to create the clicker quizzes and hand out the game codes generated by us. We will also need to be able to gather data of how well students who play the game are doing. This requires the ability to access certain information from the WSU database.

### Mapping Requirements to Technical Specifications

We have distributed tasks for each of the gaming specifications to each designer. One of the minigames is already created by a previous group and simply needs updates and revisions. The other three minigames are made completely from scratch by three individuals. Each individual will create an entire minigame themselves and will all be linked to the incremental game which is created by another individual. The last individual will work on the database that will acquire and store information from the games. The games will be tested and balanced by

the entire group after they are done. Testing for each minigame during the process of creation is relied on the creator of the game.

The incremental game will be receiving data from each of the minigames and then sending it all to the database. The incremental itself will keep track of coins gained, rate in which the progress bar fills, the level of the player, login history, and time played actively in incremental. There are two different types of currency: idle and active coins.

The seeker game will need to save the player stats, towns visited, progress in the storyline, quests completed, and town population.

The mastermind game will save player scores and stats of the games they've done. The game will also save a board if the player leaves a game midway. The number of hints and time will also be saved.

The conqueror game will save player stats and unlocked weapons, weapon upgrades, weapon pieces, and ship equipment.

The survivor game will save the upgrades purchased, stages purchased, and their stats.

#### Summary of Target Technical Specifications:

Each student will be working on a separate part of the whole game and only after each part is finished will we begin combining the pieces together. We plan on finishing the game by the end of the semester and may work on correcting parts of it over the break. We plan on deploying the game to certain classes in WSU at the beginning of the Fall semester.