

Gamification

Team: Formed Fiction

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Document 4: Report of Alpha Prototype Results

## **Alpha Prototype Description**

The alpha prototype game is somewhat far from being deployable to people for testing purposes. The incremental portion is able to load all of the mini-games, but is not able to communicate with the database and server to save and load players' data. Each mini-game are mostly playable on their own, but do not yet contribute to the incremental portion as they are supposed.

The incremental game has two types of currency. One type of currency is a passive coin which can be gained in both passive and active mode. Another type of currency is an active coin which can be gained only in active mode. Passive mode is a play mode that users can make progress while the user is not playing, both online and offline. Active mode is a play mode that users can make progress from directly playing the game. The upgrade store has already been implemented so users can upgrade the rate of progress bar, bonus coin and EXP with coins. There is a given amount of time for each player, and they cannot play the minigame if they do not have enough given time. It can be displayed on the top-right of the screen, so user can check their remaining time.

The seeker game has two modes: story and dungeon. The story mode will utilize incremental stamina every act so that the player cannot go through the entire story in one sitting. The story mode will tell the story of the seeker game in an RPG type setting. It also features lots of dialogue and graphics. The dungeon mode is available from the beginning for those who do not want to go through a storyline. It technically takes place post story, but the story is not required for the player to be able to understand how the dungeon mode works. The dungeon mode features randomly generated dungeon for the player to explore and find loot. The player can also upgrade their character to be able to explore more difficult dungeons and acquire better loot. The loot can be sold for incremental money or traded for certain items which benefit the player in dungeons.

The mastermind game currently features only a sudoku game. The sudoku game will feature multiple difficulties as well as a 6x6 board and a 12x12 board option on top of the regular 9x9 board size. The player will gain points depending on how much time it took for them to complete the board. The timer can be turned off for those who do not wish to see the timer. This will not affect their score. The points will then be converted to incremental currency.

The Conqueror game is designed to be a difficult game that will challenge the player through difficult bosses. It is a top down shooting game that allows the player to collect guns, upgrade skills, and overcome tough enemies. The game has a core gameplay loop where the player will attempt a boss, likely fail, and try again. Eventually either gaining enough upgrades or player skill to overcome the boss. To help with this, there are smaller stages that are easier to complete and can give rewards that will help defeating these bosses easier. After defeating a boss, the player may get a gun upgrade to help them against future bosses, and the gameplay loop essentially resets, with the player becoming stronger and the next subsequent boss harder to defeat. Currently the prototype uses saving and loading from a text file, but will move over to using the database in the future.

The database has been implemented for the games as they are now and will be updated as more features are added to the games. The server code has been modified, but the server itself has not been updated to the code yet. Right now, the server supports the game created by the previous team. Our game has some code created for saving and loading some data for the games, but the code has yet to be tested.

### **Design Modification Resulting from Alpha Prototype Testing**

Many bugs in the games were discovered that will require fixing. The games require completion before they can be distributed to testers to get feedback. These feedback will be the basis of our modifications for most of Fall semester. Depending on the amount of feedback, we may be able to add more games and/or more features to our current game.

The incremental game will require an ascension feature as well as lots of balancing for the leveling up progress bar. It will also handle the saving and loading to and from the database. Currently, inserting the redeem code is not yet implemented. It is required to be modified.

The seeker game requires the completion of all the story quest scenes and dungeon balancing. The stores in the seeker game also requires items to be able to be purchased and to sell the items for incremental currency. Dialogue box bugs needs to be fixed.

The mastermind game requires pencil mode to be implemented as well as change the board size. There will also be extra mastermind type games later so that it's not just a sudoku game. Points to currency also needs to be implemented and balanced.

The conqueror game will need to have improved movement, as in some computer configurations the movement appears to be broken. Other small issues will be fixed as well. In the future bosses will be equipped with additional skills, with later bosses having more skills than the prior ones. The player will also be equipped with new features, and have more skills to choose from. Using incremental currency, the player will also be able to upgrade their stats to make tackling bosses easier.

The game networking code will be completed to save and load the content minigames have currently. Once that is completed, the game will be tested to see if it can load and save the player data needed for the games. After fixing all of the codes to make it work correctly, the database, server code, and the networking code will be updated to suit the various upgrades and changes each of the games will implement in the future. The back-end code and database will be implementing methods that keep track of statistics, such as a player's various actions in the game, needed for the research.

### **Summary of Alpha Prototype Session with Mentor**

The requirements for all games are very well defined at this point and should not have any more further additions to it until Fall. The game was meant to be ready for distribution for testing by the end of the first semester. This was not the case. The game requires further improvements before distributing to people would provide viable feedback. Our mentor has stated that the game is not in the position he wants it to be currently. Most of the group will be working on the game over the course of the summer and hopefully provide a good enough prototype for our mentor to distribute to others for testing purposes.

We will be utilizing the feedback from the test users to improve our game during Fall semester. The game will also be deployed for WSU students to play and for the researchers to collect data from during that time.

A list of things we need to include in the game before it can be deployed for testing includes finishing the main quest and dungeon balancing in the seeker game, completing the sudoku game along with a pencil mode, adding multiple stages and weapons to the conqueror game as well as weapon crafting and upgrading, ascension perks to the incremental game, and balancing all the games overall. On the server side, the server needs to be updated to the code that suits our game. On the game side, code for saving and loading from the server needs to be finished. Once that is completed, the server and game will be able to communicate with each other. Testing the game and server will come next in order to eliminate as many bugs as possible and make the game playable.