## Software Chasing: A Boilermaker Saga

# **Team 33 - Product Backlog**

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#### **Problem Statement**

There's demand for a video game that revives the premise of older games on Nintendo DS but with more modern theming and infrastructure to provide a better experience. Our product will be different from existing games because we will use Purdue as a reference and use existing professors as game concepts such as NPCs and bosses. Coming together as Software Chasing: A Boilermaker Saga, a retro style game, to provide a student with the experience of going through Purdue as a student in the CS/DS community and encountering different professors with a fun battle twist.

### **Background Information**

RPG stands for role-playing game, which is a popular type of video game where a player controls a character who completes a set of tasks set in a fictional world. As the game progresses, the player takes their character through challenges to improve their skills and other attributes. There is typically a central theme with quests and simple combat. Some similar applications are *Pokemon Black and White* and *Undertale*. Typical problems and limitations that can plague RPG games have to do with latency and bandwidth. If the game is too slow or doesn't allow enough players to access the game at once, it could result in unsatisfied users who do not trust the usability of the game and will not come back to play it as often. Solutions could be to use a reliable server and strategically build an RPG that requires less memory or storage.

## **Functional Requirements:**

- 1. As a player, I would like to be able to see my character.
- 2. As a player, I would like to encounter regular enemies.
- 3. As a player, I would like to encounter bosses with unique abilities.
- 4. As a player, I would like to engage in combat.
- 5. As a player, I would like to be able to interact with NPCs.

- 6. As a player, I would like to be able to learn new abilities based on my class to use in combat.
- 7. As a player, I would like to be able to move in the world.
- 8. As a player, I would like to not clip through the floor, walls, ceiling, etc.
- 9. As a player, I would like to be able to beat the game by progressing through all the levels/"years".
- 10. As a player, I would like to be able to have skill trees that can be upgraded.
- 11. As a player, I would like to be able to see different characters for the various types.
- 12. As a player, I would like to be able to upgrade my "skills" by interacting with characters.
- 13. As a player, I would like to choose a class deciding which skill set I can pick from.
- 14. As a player, I would like to be able to view my current skill upgrades and which ones I can upgrade.
- 15. As a player, I would like to be able to change between and load into new levels once I complete one.
- 16. As a player, I would like to be able to see my level progress while playing.
- 17. As a player, I would like to be able to purchase gear.
- 18. As a player, I would like to be able to equip gear to increase my stats.
- 19. As a player, I would like to be able to edit (remove/change out) my character's gear.
- 20. As a player, I would like there to be a wide variety of different gear for me to purchase.
- 21. As a player, I would like there to be a wide variety of items for me to utilize in encounters.
- 22. As a player, I would like to be able to view my stats ie. health, energy etc.
- 23. As a player, I would like my stats to be persistent every time I load into the game.
- 24. As a player, I would like to have random encounters occur (Similar to Pokemon).
- 25. As a player, I would like to access my inventory.
- 26. As a player, I would like to have a special trivia gamemode outside of the normal game.
- 27. As a player, I would like to hear music while playing.
- 28. As a player, I would like to hear sound effects from interactions and movements.
- 29. As a player, I would like to be able to edit my character's upon initial load in by spending points on various traits such as health, stamina and intellect.
- 30. As a player, I would like to be able to have an interactive menu/option screen.
- 31. As a player, I would like to be able to customize settings such as volume (Y/N) and zoom level.
- 32. As a player, I would like to be able to easily report bugs I find to the developers.
- 33. As a player, I would like to be able to give my feedback(good or bad) on game content.
- 34. As a player, I would like to see who created this game in the credits.
- 35. As a player, I would like to see this game and download it from a website.
- 36. As a player, I would like to battle/trade with fellow players in some capacity.
- 37. As a player, I would like to be able to take in-game screenshots.
- 38. As a player, I would like to be able to register an account.

- 39. As a player, I would like to be able to have multiple characters on my account to play as.
- 40. As a player, I would like to be able to reset my password if I forget it.
- 41. As a player, I would like to have a "home" area that I can customize.
- 42. As a player, I would like to purchase items to customize my home area.
- 43. As a player, I would like to be able to select my character's gender, hair, skin and eye color.
- 44. As a player, I would like to be able to login to my account on different computers.
- 45. As a player, I would like to be able to pause the game.
- 46. As a player, I would like to see an exciting notification interface when I unlock new abilities.
- 47. As a player, I would like to be able to encounter a wide variety of unique enemies/bosses.
- 48. As a player, I would like a new and unique experience when playing a character with a different class.
- 49. As a player, I would like to be able to delete a character on my account.
- 50. As a player I would like to be able to earn achievements for completing challenges.
- 51. As a player, I would like to be able to view my achievements.
- 52. As a player I would like to be able to show my achievements to other players.
- 53. As a player I would like to see the real time and or date in game.
- 54. As a player I would like to be able to view the total time played on my profile.
- 55. As a player, I would like the ability to transfer my character to another user.
- 56. As a player, I would like to be able to name my character

## **Non-Functional Requirements:**

### Security

Our application should be profoundly secure and keep player data safe. Access to any individual player's account should be password-protected, and we will store all account data using approved industry standards.

#### **Performance**

Any player logging into our application should be able to load into their world in less than 60 seconds. Since players will each load into their own personal worlds after connecting to the game server, 25 different clients should be able to do this at once without compromising gameplay for any of them.

### **Interface Functionality**

The entire application interface should be attractive and easy for users to interact with. Players should be able to toggle between the application window and other windows on their computer easily while it is running.

#### **Product Owner Capabilities**

As a quality assurance measure, the product owners should be able to see the stats/progress of each user and we will set up alerts or real time updates that notifies the product owner if a server were to go down.

#### **Player Specifics**

Each player should have their own game world, which they will load into after logging in and connecting to the server. All player data and information should also be stored in individual accounts, which are linked to email addresses.