

CS 40700

Project Charter

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Problem Statement

Every year, people are clamoring for new entertainment options. This holds true to the video game industry. ParrTay Gaming, LLC hopes to sate this endless entertainment hunger by creating a new and innovative single player game. This game will be unique due to its fast paced retro action combined with large-scale complex character development. While impossible to create an entire game in a few months, our team hopes to create a fully functional demo by the end of the semester.

Project Objectives

The overview list of what this demo will do is as follows:

- A final executable playable either via application or via online hosting
- Basic Demo menu with options to play and quit
- A player character that can move, and fight via user input in real time
- A GameController (backend) that stores and manipulates various variables and sets up game scenarios.
- A Heads Up Display (HUD) that allows the user to keep track of their character's health, cooldown times, etc.
- A command list the user can pick from, which their character can use in combat
- Enemies with Artificial Intelligence to hamper the player character's way
- A well designed "labyrinth" for the player to explore and solve puzzles in
- A final boss to conclude the demo experience
- Art, animations, and music to help immerse the player in the world of the game
- Possibly other interesting mechanics such as a currency and shopping system, as well as procedural random generation for the layout of the labyrinth.
- Finally, if time allows, an arena extension to the demo

*The only things we will be able to reuse from ParrTay Gaming for this demo are art and animation assets, as well as basic movement functionality.

Stakeholders

Stakeholders of the demo are:

-ParrTay Gaming LLC (The on-going creators of the game we are making the demo for)

-Customers (To play the game)

-Itch.io (The website to host the demo)

Deliverables

Mentioned above, the final deliverable of this project will be a demo for a game by ParrTay Gaming set to release much later. This demo will either be downloaded and played as an executable, or played online via itch.io web hosting. The demo will allow the player to explore a labyrinth (one of the game's complex "levels"), then find and defeat the final boss. It is a top-down 2D action-adventure game.

The game will be created using the Unity game engine, with all code being done in C#. Additionally, code collaboration will be done with a private GitHub repository. Discord will be used for communication while Google Drive will be used for document collaboration.

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Michael Parr: I created a multiplayer arcade game that had players compete against each other to be the last one standing. The core theme was time and everything in the game revolved around it. GitHub is private and not mine so unfortunately, I can't make it public.

Justin Bonner: We made a web app, Meetchu, to help students schedule study time with each other. Meetchu can also be used to send messages.

<https://github.com/dan-zheng/meetchu>

Ben Ott: My group and I created a security tool set we called SecurItTools using python and PyQt. While there were security softwares that could be used, they were not user friendly. Therefore we created various security modules and put them together in a simple user interface. The GitHub is private, and it is not under my name, so I can not link it here.

Kendall Z Bowles: We made a scheduling app (for Android) that let a group input their individual class schedules, and the app helped to find times that everyone could meet up. The GitLab repository for this can be found at:

<http://allen-software.com/gitlab/cs307-Fall2016/timefuse-client>

Allen Nguyen: I was part of a group that created a web app which allowed users (primarily students) to rate courses and add comments about courses, which would help other students in choosing their classes for schedules. Other features included rating dorm halls and dining halls for a rating on the entire college experience. The Github is private, so I can't link it here.

Aaron Nordhoff: I helped develop an Android application for Purdue's Bowling Team to assist in the scoring of games and tracking of statistics. Each player was able to create a personal account and log their progress, compare their statistics with other players, form groups, and estimate future performance. Coaches of the team had extra privileges, allowing them to schedule practices and tournaments and communicate with players. The front-end and back-end were developed in Java, while Firebase Database was used to store player information and statistics.

<https://github.com/BrandonLoi/BowlingTeam>