Final Game Proposal

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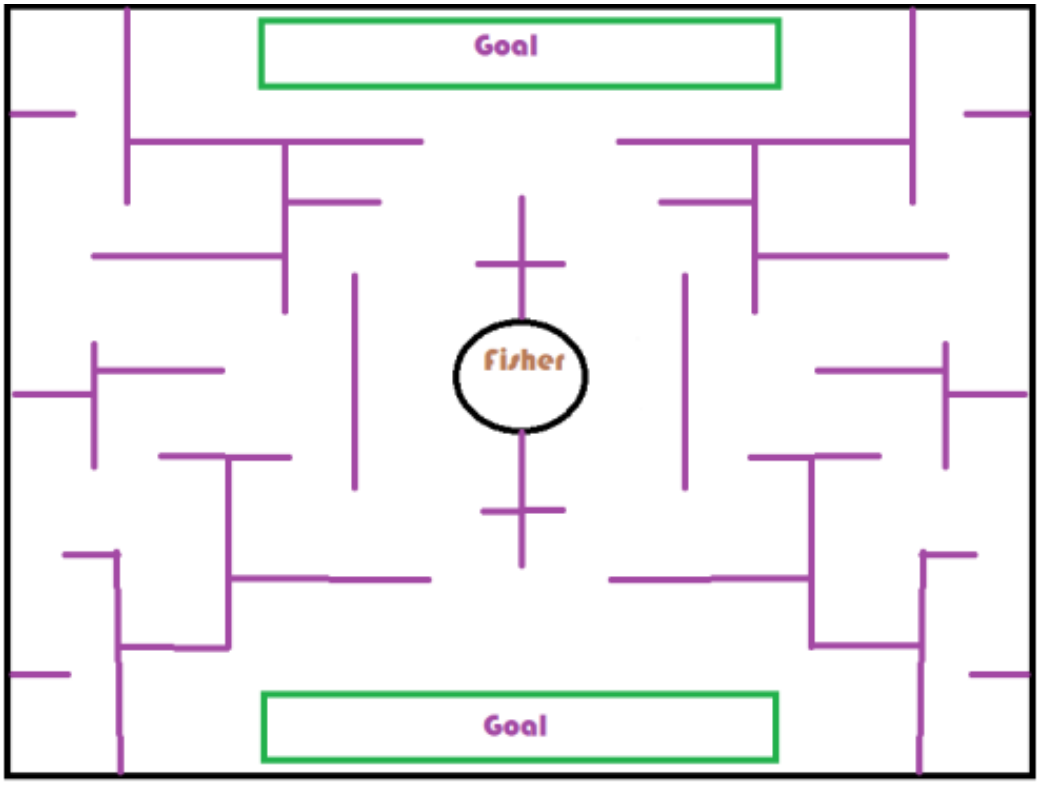
1 Game Design

- Our game will be a 2-player 3D orthographic, top-down viewed maze game called Grouper.



2 Game Description

- General Idea / Game Narrative
  - The players start at different locations and try to collect as much fish as possible in the allotted time period. As the players collect fish, they will be slowed down. They will also have the ability to hinder each other by throwing out an ice bomb which will freeze the affected player for 1-2 seconds. The goal is to deliver as much fish as possible to the goal location before the time ends.
- Player Goals
  - The goal of the game is to recruit as many fish as possible before time runs out. The players will have obstacles such as a decrease in movement speed as they collect more fish. There will be 2 goal zones for the players to drop off fish as they progress in the game so that the players can regain movement speed in order to collect more fish before the time runs out.
- AI Goals
  - The goal of the fisherman AI is to kill the small fish mobs by stealing them from the players.
- Controls
  - The players will be able to play the game through the keyboard keys WASD and arrows. There will be a button for each player to fire homing ice bombs at each other.
- Players
  - The players will act as tribe leaders of 2 separate tribes.
- Relevant Story
  - Once upon a time, there were two tribes at war. At the brink of desperation, they have to recruit young baby fishies to fight for them. However, because there are fishermen trying to take their potential young baby fishies from them, the chieftain fishies have to go as fast as possible before all the young baby fishies disappear.

3 Specific AI Implementations

- We will implement Finite State Machines, flocking/crowding, pathfinding, and agent sensors for the AI aspect of the game. The game will have a fisherman in the middle that will go through several different states, such as idle, casting hooks, throwing bombs, etc. The small agent fish will crowd around the players as they are recruited and slow the player down. The players will have the ability to use homing ice bombs to hinder the other player to gain an advantage and we will implement pathfinding for homing ice bombs. The agent fish will have sensors that will allow the player to collect the fish once they get into a certain range of the agents' position.

4 Implementation Plan

- Oct 1 - Final Proposal due

  Prepare project backlog with about 8 items. Break down the first 2 items.

  Oct 22 - Alpha Release

  Complete all game mechanics (bugs okay, but should be kept to a minimum)

  Nov 5 - Beta Release

  Implement art and sound assets (bugs okay, but still should be kept to a minimum)

  Nov 19 - Public Release (In-class demonstration) Enough bugs fixed to be playable and enjoyable

- Gantt Chart showing all required tasks, the estimated number of hours/days for completion of the tasks, and the dependencies between tasks.

- Which members are leading which project pieces

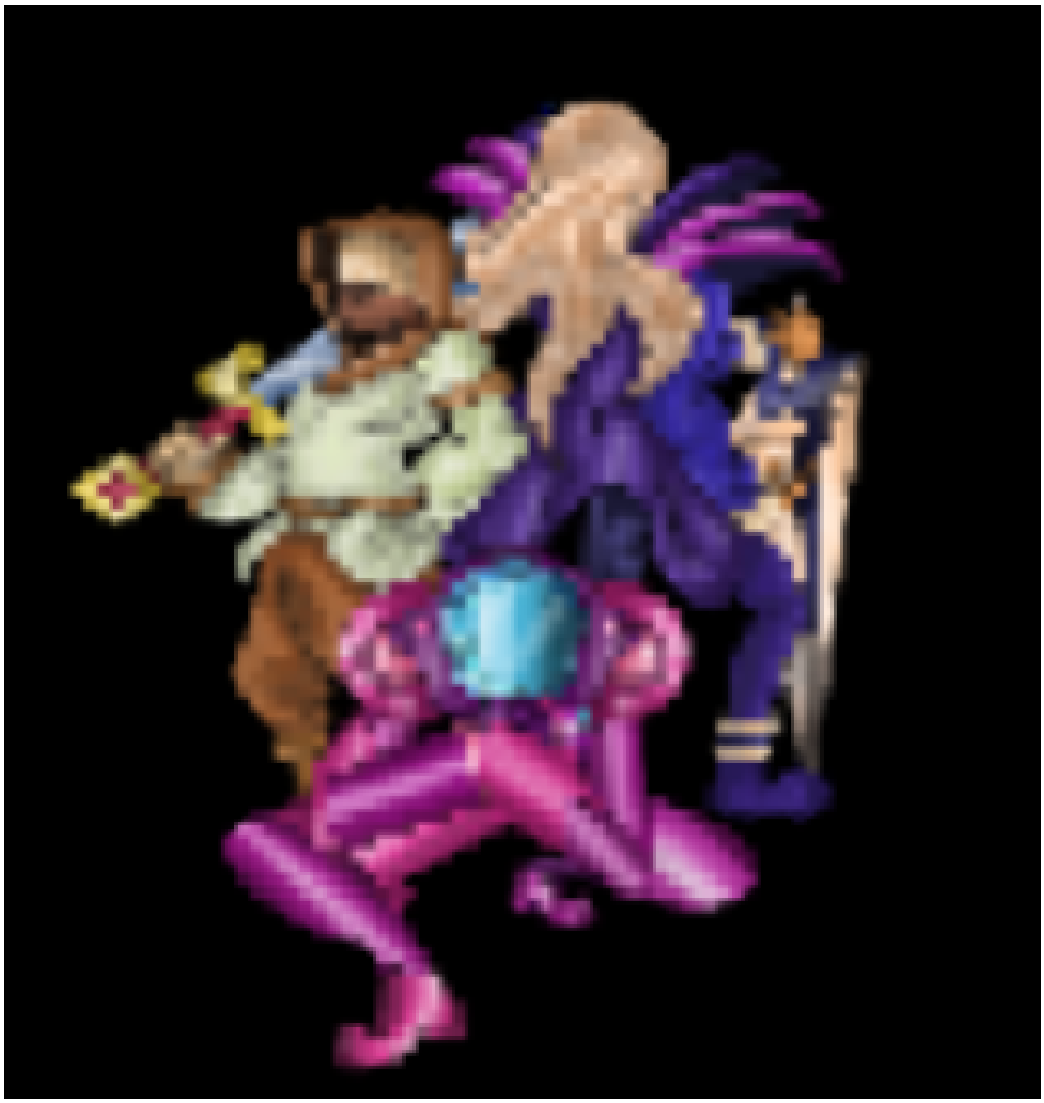
  - Code: Center Fisherman : Ian
    Fish team-setting and flocking : Leo
    Fish sensors for players : Anna
    Homing ice bombs : Leo
    HUD : Krystale
    Maze level design : Anna
    Art : Anna and Krystale

* Assets:
  Fish
  Player Fish
  Background
  Fisherman
  Water filter/effects
  Coral/water plants
  Boat
  Hook

BGM, SFX, other sounds: Leo and Ian

5 Prior Art/ Market Research

- Screenshots/brief descriptions of members' previous projects
  - The Revenger



- Other published games with similar gameplay mechanics
  - Freddi Fish 5
    - 2001
    - 119,739 retail units sold in North America
    - Maze based puzzle game in which you control Freddi Fish.

    - The goal is to complete the mazes while avoiding enemies/obstacles
  - Agar.io
    - The player slows down when collects more fish in our game. The player slows down when eats more food and/or other players in Agar.io.

6 Marketing Plan

- Website development / design
  - We will use Weebly to create a website and add descriptions about our game and to advertise.
- Social media plan
  - We will use social media such as Instagram to advertise our game. We will also share with other people and advertise.
- Graphic design for Box Art, web advertisement
  - We will use software such as Adobe Photoshop to create a graphic design poster for our game so that we can advertise and spread the word about our game.