

Team Members

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Period

2

Team Name

Oak Enterprises

Project Title

A Maze of Historic Proportions

I. Project Idea

- Summary: Eight mazes of increasing difficulty, with a boss after each level, and two main bosses after each set of four levels. Each maze will be themed on some historic period, ranging from prehistory to the far future.
- Genre: Adventure, Puzzle, Maze
- Similar games:
 - Scary Maze Game
 - TimeSplitters
 - The Amazing Maze
- The player starts out with three weapon types, corresponding to the three enemy types. Each weapon is effective against one enemy type (4 damage), ineffective against another (1 damage), and regular against a third (2 damage).

II. Critical Features

1. Player
 - a. Controlled by seven buttons
 - i. Movement (4 directions)
 - ii. Attack (3 weapons)
 - b. Changes shape based on theme
2. Enemies
 - a. Three types:
 - i. Fast - fastest travel time
 - ii. Strong - deals more damage
 - iii. Long-range - starts attacking from afar
 - b. Weapon vs. Enemy system:
 - i. Long-range > Fast
 - ii. Fast > Strong
 - iii. Strong > Long-range
 - c. Change shape based on theme

3. Bosses
 - a. Have special powers based on theme
 - b. Increase in difficulty as game progresses
 - c. Powerups available during Boss rounds
4. Powerups
 - a. During boss levels, there will be three types:
 - i. Increase speed for certain amount of time
 - ii. Regain health
 - iii. Increase attack for a certain amount of time
 - b. Will appear on random patches at random times
 - c. Special effects will occasionally occur
5. Maze
 - a. Colors:
 - i. Walkable path - 16.6
 - ii. Ending point - 72.5
 - iii. Other colors - alternates between two themed colors

III. To Be Added Later Features

1. On screen text indicating “Game Over” and other messages
2. Music for each level, and sound effects for fighting
3. A meter which displays health of the player, as well as a meter for the boss’s health.
4. Animations in between the end of a level, and the start of a boss. This could be some sort of fast cellular automata, like a Persian rug.

IV. Development stages:

1: As a general guideline:

- Create the first level
 - Since it is the easiest level, it will serve as a “model” for which to base the other levels off of - all the levels will be similar in the way they function.
- Create the other levels
 - Involves, but is not limited to:
 - New mazes
 - Enemy/player graphical design
 - Map graphical design
- Boss Creation
 - 6 level-based bosses
 - 2 main bosses (after levels 4 & 8)

2: Our basic functional stage:

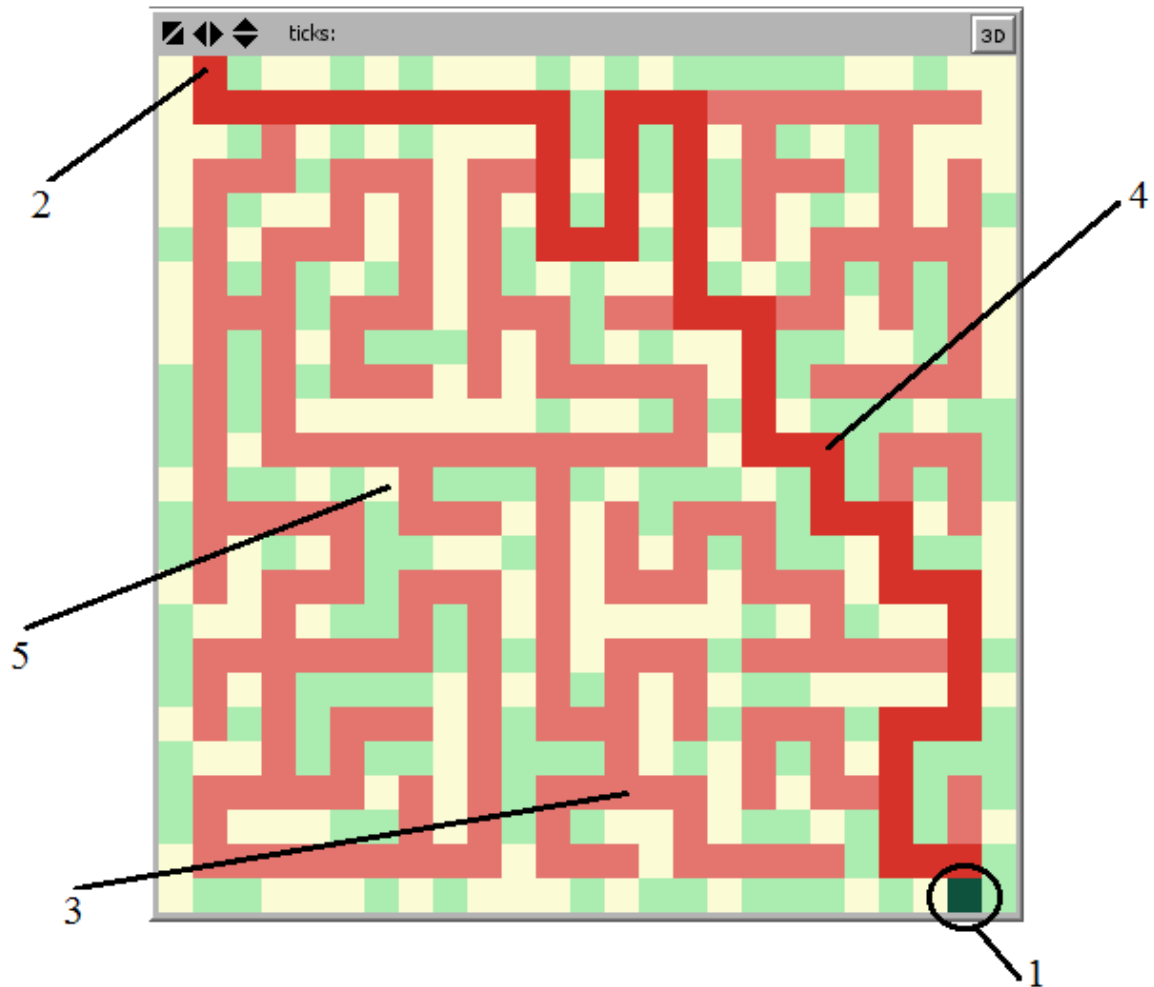
- Distinct mazes exist for each level

- There is one type of player, and three types of enemies
- No powerups
- The player can move and fight within the boundaries of the path, and his health and enemy strength are adjusted so that he doesn't die right away

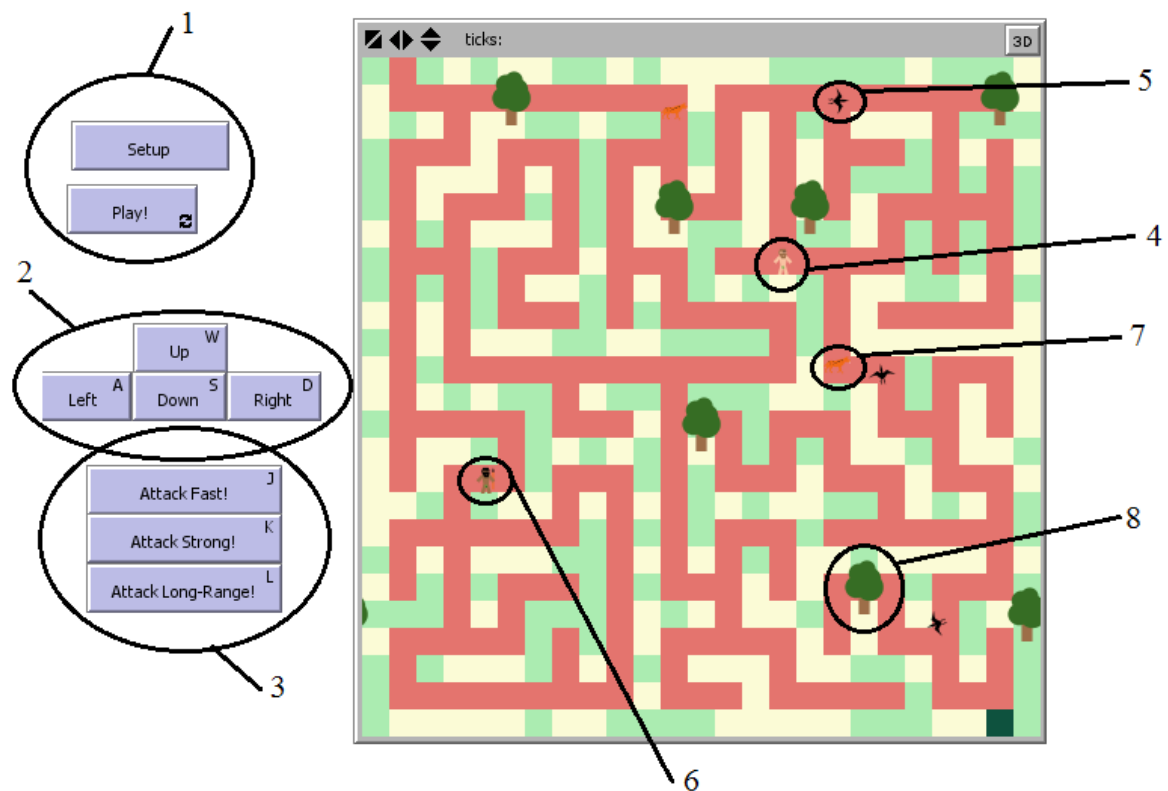
3: How we will divide the work:

- Alon:
 - Will create the maps
 - Difficulty level of maze
 - Graphical design
 - Will create characters
 - Graphical design
 - "Personalities" based on character, including
 - Motion algorithms
 - Attack algorithms
 - Weapon effectivity
 - Health monitoring
 - Testing and "bug hunting"
- Joseph:
 - Will focus on historical themes for each level
 - General boss planning
 - Enemy/Player roles
 - Will create power-ups and special effects
 - Health boost (for enemy and player)
 - "Game-Changer" effects (for example, health-draining meteors fall)
 - Testing and "bug hunting"
- In general:
 - Joseph will focus more on conceptual ideas
 - Alon will make them work

V. Diagrams (based on the Prehistoric Theme)



1. Target (pcolor = 72.5)
2. Starting Location
3. Maze corridors (pcolor = 16.6)
4. Most direct route from start to end (for in-prototype demonstration purposes, will not be featured in the actual maze)
5. Maze walls (act as a background, consist of 2 themed colors)



1. Setup and Play buttons
2. Player movement controls
3. Player attack controls
4. Player
5. Enemy (type Fast)
6. Enemy (type Long-Range)
7. Enemy (type Strong)
8. Tree (decoration)