

(temp) Class Diagrams

written by [Eunhak Kim](#)

Identifying potential classes

Usage Scenario

The game teaches early high school students programming through building algorithms to navigate mazes.

When the game is launched, the player is prompted to enter their name, and if they are a teacher or a developer, their password. This takes them to the main menu, with options to play a new game, continue a saved game, change settings, and view the tutorial and leaderboard.

The game has multiple levels of increasing difficulty. The game screen has a maze in the center and blocks like left, right, and loop at the bottom of the screen that can be dragged to the side to make an algorithm. The player must make an algorithm that when run will go through the maze.

The progress is automatically saved, and players can continue the next time they log in.

There are special modes for teachers and developers that are unlocked with a password. The teacher mode allows the user to access students' progress data. The developer mode additionally has bug reports and cheat codes.

Potential classes

- Game
- Algorithm - ActionChain
- Maze
- Player
- ~~Teacher~~
- ~~Developer~~
- ~~Main menu~~
- Settings
- ~~Tutorial~~
- Leaderboard
- Level
- Block
- Progress
- Mode
- Bug reports