

GROUP 11
Nicholas Lagasse
Ekansh Chawla
Felmer Macadangdang

2.1 - The Game

Maze Escape is a stealth-based puzzle game where players navigate through a maze filled with challenging obstacles, such as moving ninjas and restricted holes. The ultimate goal is to escape the maze by reaching the designated endpoint while completing the mandatory task of collecting items.

Our initial design revolved around creating a dynamic and interactive maze game with stealth mechanics, enemy AI, and customizable difficulty settings. While the core mechanics were implemented as planned, there were several adjustments during development:

- **Changes:**
 - Enhanced the AI system using backtracking and DFS to reach the player.
 - Introduced an item collection feature to add an optional layer of challenge.
 - Redesigned the maze layout to improve gameplay balance and player experience.
 - Removed the stealth mechanic to meet deadlines and core requirements.
- **Lessons Learned:**
 - Agile iteration allowed us to adapt quickly to feedback and unforeseen challenges.
 - Effective team communication ensured all members could contribute meaningfully, even under tight deadlines.

2.2 - Tutorial

- 1. Launching The Game**
- 2. Choose Difficulty**
 - a. Select from one of three difficulties
 - i. **Easy:** One patrolling samurai
 - ii. **Medium:** Two patrolling Samurai
 - iii. **Hard:** Three patrolling Samurai



3. Moving the ninja

a. Keyboard Controls

- i. Use the WASD keys to navigate. Move up, down, left, or right.
- ii. The player cannot walk through barrier cells



4. Enemies

a. Samurai

- i. Samurai patrol the grid one cell per tick, hunting down the player
- ii. Samurai, like the player, cannot pass through barrier blocks.
- iii. Samurai will cause the player to lose points, hit 0 and the player loses.

b. Hole

- i. Holes are stationary enemies
- ii. Holes, like samurai, will cause the player to lose points, hit 0 points and the player loses

5. Winning the Game

a. To Win

- i. Players must collect all keys and reach the treasure chest to finish the game

b. Losing

- i. If a player's score reaches 0 the game is over and the player loses, the player must avoid holes and samurai to prevent this from happening.

```
Congratulations! You've collected all mandatory items and reached the chest.  
Final Score: 130  
You win!
```

