

# MAZE

A N C I E N T S   G O D S   L A B Y R I N T H

## WHAT

Progress Report

## WHERE

3D Game  
Programming

NCTU 2016

## WHO

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# What we have done

## Menu

Menu is the first screen you will encounter when playing the game. 'Play' button will start the game. 'Options' button will show the configuration window which allows you to change some parameters regarding the game play. While 'Exit' button will close the application.

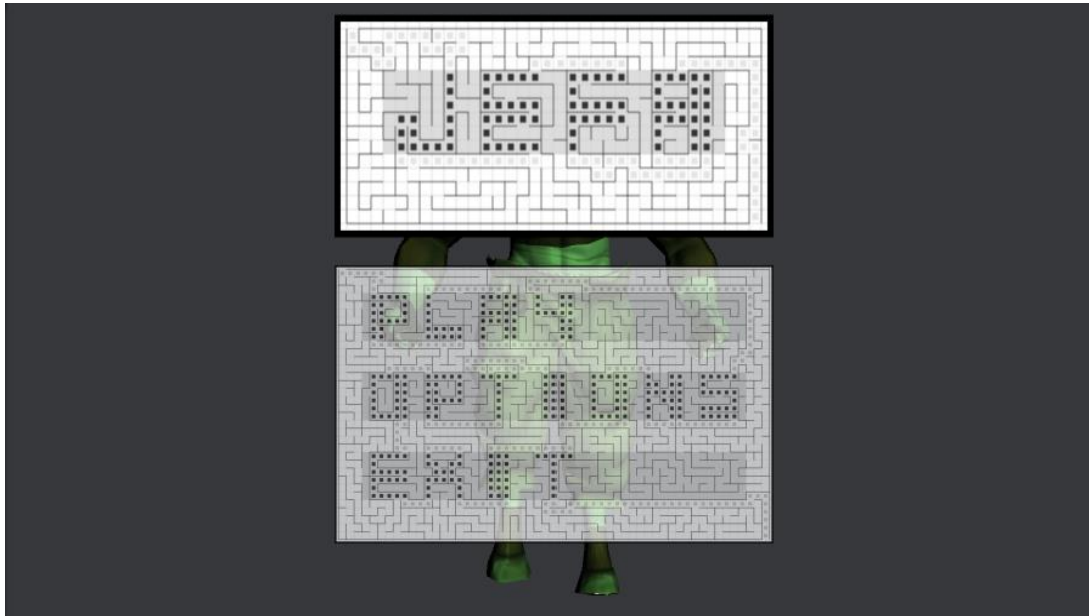


Figure 1. Screenshot of main menu

## Game scene

This part shows you about current progress of the gameplay, including the teleport point, the preview of the gem, the player and monster character, and the generated maze which will be shown as a cube maze.

Currently, the player are already be able to move. The player is not yet configured to be able to take the gems and do a teleportation. But those objects are already in the map and ready to implement the action.

Here are the screenshots of the game:

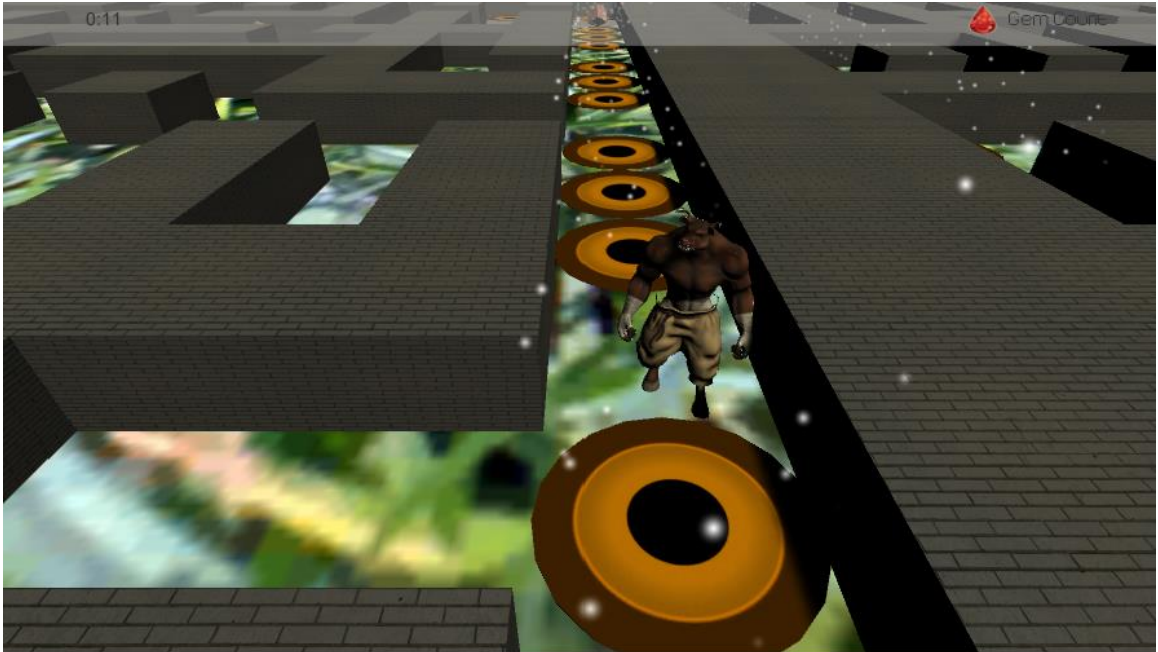


Figure 2. Screenshot of a player near a teleportation point



Figure 3. Screenshot of a player near a gem



Figure 4. Screenshot of a player (right) with a monster (left)

The AI of the monsters is already be able to walk around the map. But it cannot chase the player yet. Also, currently there is only one monster on the game, and it is used for developing. But when the AI is stable, there will be enough monster to make the game more interesting.

The HUD is still under development. There will be the remaining time of the player to reach the finish line. On the HUD, there are also the player's health and the gem count.

## Map scene

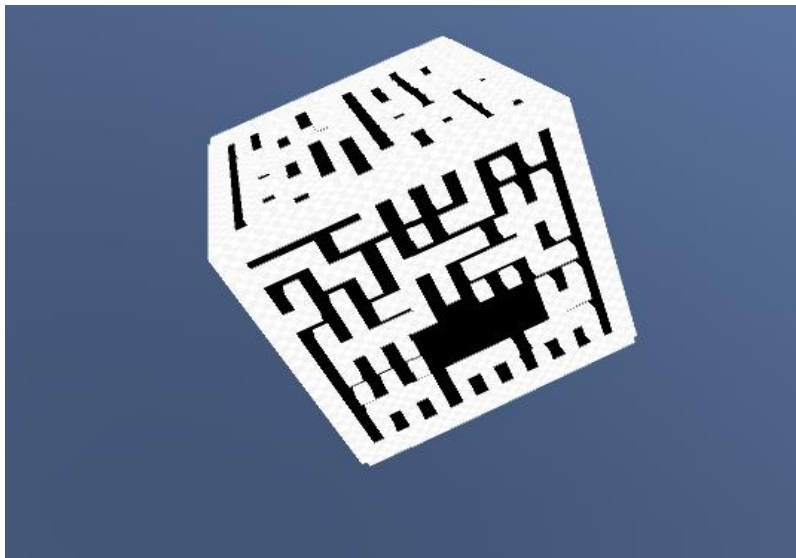


Figure 5. Screenshot of the minimap

The picture above is the screenshot of the minimap. It will shows up if the player pressed the 'M' key when playing the game. It gives the player visualization about the cube maze, the

position of the current player, and the finish point. But, the gem will not be visible since it will make the game uninteresting because the player will always look at the minimap.

## Task List

Here is a copy of the completed and yet-to-be complete tasks over the past few weeks:

To Do				21/38 completed
✖	12/11	Setiawan	Create maze generator algorithm	
✖	15/11	Setiawan	Implement collision detection between Jefa and maze wall	
✖	15/11	Setiawan	Start and end point, and teleport point	
✖	15/11	Jesse	Implement "M" press to view cube	
✖	15/11	Fanuel	Animate the character	
✖	22/11	Setiawan	Replace ground to maze, implement map to game	
✖	22/11	Jesse	Make the cube each face a collection of rectangles	
✖	22/11	Fanuel	Choose the avatar for monster and add it to the maze	
✖	29/11	Jesse	Implement cube map rotation	
✖	29/11	Setiawan	Modify the maze generator	
✖	29/11	Fanuel	Design game start menu screen	
✖	1/12	Setiawan	Check if maze cube face orientation is correct	
✖	6/12	Fanuel	Refine start menu UI and implement it	
✖	6/12	Jesse	In map view, implement space bar press to reset cube orientation to show the side player is on	
✖	10/12	Jesse	Add finish point in cube map	
✖	13/12	Jesse	Implement UI in game scene showing number of gems and time past	
✖	13/12	Fanuel	Modify menu UI to make it more visible	
✓	13/12	Setiawan	(Copy code to current version) revised cube map showing correct orientation, more zoomed in view, and "Space" key reset to starting orientation	
✓	13/12	Setiawan	Create a ball on finish point (change to Fanuel's angel later) (Add some particle system too)	
✓	13/12	Setiawan	Scatter 3 gems in each side of cube	
✖	13/12	Jesse	Add texture and UI for map scene	
x	15/12	Setiawan	Create global variable	
x	16/12	Setiawan	Create a particle system ground to indicate that the ground is a teleport point	

20/12	Fanuel	Fix character moving. DO serious TEST and ERROR. Dont just implement without testing it.
20/12	Fanuel	Position character to the starting point of the maze when the game starts
20/12	Jesse	Implement cube map showing player position and finish point
20/12	Setiawan	Implement teleportation point to move from one side of maze to another
20/12	Fanuel	Choose models for gem fragments
27/12	Jesse	fading animation for teleportation
27/12	Fanuel	AI for monster
3/1	Fanuel	Implement AI function – player lose half of the gems (should be integer number, and if gem = 1, lose 1 gem)
3/1	Setiawan	Create SFX, record sound effect
9/1		Finish the report

## What we will do next

Here is the list of items we will be doing in the remaining weeks of the term:

### Programming

- "Tutorial" option in menu
- Tutorial scene showing brief game story, basic function of keys, monsters, gems, goal of game
- Option scene showing turn music on or off, information of the developers (us)
- Level selection scene show unlocked levels
- Add "Select level" option in menu
- Change "play" in menu to "Start new", and move it below "Select level"
- Implement more game levels
- Background music and sound effect

### Testing

Test different scenarios, such as:

- Play with / without sound
- Play with / without tutorial
- Start new game or load game levels
- Collide with monsters
- Go to finish point without gem collected
- Go to finish point with gems partially collected
- Go to finish point with all gems collected
- Play with / without checking the cube map

- Accuracy of cube map
- Proceed to next game level
- Wining scene and losing scene

## Documentation

- In-line documenting the code
- README file for the game
- Final report
- Final demonstration and presentation rehearsal
- Q&A preparation