**Project Proposal**

20171068 Joohyeok Kim

20171163 DongYoon Ryu

1. Brief Concept: We will make a 1st person view maze escape simulation.
2. Planned contents  
   A. Automatic maze generation by maze algorithm: By using random maze algorithm, we will construct the array of the shape that represents the maze at the initial stage of the game. And we will render walls based on that array, by position of player and distance.

B. Life count: The player gets 3 counts of life. And if the player is caught by trap, the player will lose life count and return to the initial point.

C. Save point: The player can designate certain point to return, when life count falls. The player will start at that point instead of the initial point.

D. Perspective view: The player will see in 1st person view, and perspective view.

E. Collision against the wall: The player will not be able to pass through the wall. Also, the player cannot see beyond the wall.

F. Textures on the walls to indicate the movement of the player: Textures on the walls will differ by the distance from the center.

G. Traps to enforce players to move fast or move player to the initial point: If the player stays in certain area, then the player will lose life count. And if the player steps on certain tile, then the player will lose life count. Certain motions would be applied for times when the life count still remains after interacting with the trap.

H. Compass to guide the player to the goal: We will put arrow shaped object at the side of the window. This arrow will indicate the direction of the initial point, to prevent the players return to the initial point by self.

I. Marking function: The player can mark desired point to remember important spots. The player can place mark as many as desired. There are 3 colors designated for marking object. Unit of placing the mark is discrete tile. The player can place only one mark at one tile. Also, the player can remove the mark. \*\* The mark will be placed at the tile where the player is stepping on. \*\*

1. Planned process of the development

0) Language will be python as this isn’t that computation heavy game  
1) First, we will implement the random maze generation algorithm.  
2) Then we will implement camera view and player movement.  
3) We will implement plain wall generation and collision of the wall.  
4) We will add texture to the wall.  
5) We will add compass function.  
6) We will add trap, save point, and life count.  
7) We will add marking function.