**Purpose**  
This project aims to create a maze game that will provide a fun-filled and immersive experience while promoting teamwork and communication.

**Target Users**  
The target audience of the game is for both people who are and are not visually impaired. For people who are visually impaired, the game is specifically geared towards them on both ends of the game as they are able to be the maze runner as well as the director without having to see the board. For people who do not have visual impairments, the role of a maze runner will allow them a chance to experience a small insight in the life of someone who is visually impaired. In their role of a runner, they will have to navigate blindfolded and learn to make their way out through precise and effective communication with the director.

**Architecture Diagram**  
To get a fuller picture of the architecture of how this project will work, a more detailed description is necessary:   
There are 2 roles for players of this game: the runner and the director.  
The runner will be blindfolded (if necessary) and will be able to navigate the game using a controller and a headset which will play sounds depending on where the runner is in the maze. The runner will communicate directly with the director who is also wearing a headset and has access to a maze which s/he need not see to be able to understand (but can, if applicable).  
  
They should communicate with each other in such a manner so that the runner can describe his/her surroundings which s/he can hear at all times while navigating the maze and the director should be able to pinpoint the runner’s location from the map of the maze and lead the runner to the exit (endpoint).   
  
1) Maze  
The maze is entirely 3D printed and consists of 5 x 5 individual tiles that are split into 4 equal squares each. Looks something like:

|  |  |
| --- | --- |
|  |  |
|  |  |

These tiles combine together to make a square maze with walls in the middle and a different scenario on each edge (e.g. railroad, beach, cars, etc). Someone should be able to touch each side and figure out the scenario on each edge. For example, the railroad edge should have railroad tracks.  
  
Hardware: 3D printer  
  
2) Controller  
The controller will have 4 buttons and their functions are as follows:  
1) move forward  
2) turn left  
3) turn right  
4) turn around  
  
Hardware: Controller

**Technologies and Hardware**  
  
We will primarily use python in this project for its ease of use. It will be used to code the software side of the maze and to play sounds (.wav files) to the runner as they move nearby specific locations. Sound will be manipulated with the pygame.mixer library.  
  
The code will be made available on GitHub.

**Team Logistics**Kent Torell – Torell  
Austen Kelly – Akellyca  
Anthony Kan – Akan  
  
List the name and onyen of each team member. Choose a point person that will be responsible for relaying information to other team-mates.  Describe how the coding responsibilities will be divided among your team members. How will you share and maintain your codebase? (Github, Bitbucket, etc)