Animal Maze Capstone Planning Document

## Description:

For my Capstone Project, I will be developing an interactive replication with and old maze game concept.

Especially I want to develop the emotion like joy and excitement in my project for the user whether they are kids, youth and older people. I want to make happy everyone with this project.

From beginning of the experience, viewers can enjoy the greenery environment which makes mind peace and happy. And they will find the screen where the instructions will provided to enter into the maze.

They have to find the way to house by collecting stars and alphabets which are paired with animal images. After finding the way and reached the end of the maze they can find the house and can able to enter into the house with the help of waypoint navigation.

## Features and Dependencies:

### 3D Models

* + Maze
  + Alphabets
  + Stars
  + Tress
  + House
  + Bridge
  + Rocks
  + Compound wall
  + 3d animal models.
  + Television to implement video player

### Animation

* Stars Rotation
* Alphabets rotation
* 3d animal model animation.

### Game Loop

* 1. Interaction for player with Waypoints to find the way
  2. Game Mechanic for player to try to find the way
     1. Click on the alphabet to collect, then 3d model appears and alphabet disappears.
     2. Player clicks the alphabet and search for next alphabet for correct direction to follow the way and easily to get out of the maze.
     3. Collecting stars by clicking them
     4. Finally reaching the house they can find the total collected stars as points.
  3. Can find the restart and exit option in the house
  4. Alphabets dancing like crazy.

### Other Effects

* 1. Mixed lighting ( directional lighting as real-time and remaining lighting as baked)
  2. Particle Effects when users for collecting stars
  3. Spatial Sound effects for Alphabets and waypoints.
  4. Rewards like showering stars or any other particle effects
  5. Video player with playing alphabet song in the house in TV

Capstone Scoping

## Features and Dependencies:

### 3D Models

1. Maze model done with basic Cube
2. Alphabets are done with Maya text
3. Stars, trees, rocks house and bridge every model modeled with basic cube.
4. ~~Compound wall~~ :

I think no need of compound wall to implement.

1. ~~3d animal models :~~

Will be time taking to model everything. So replaced with 2d animal image.

1. ~~Television Model~~ :

Dropped to implement video player and want to make 3d animation.

### Animations

1. Stars and alphabet models animation implement with scripting.
2. ~~3d Model animal animation:~~

I dropped to do 3d models and want to use 2d animal images and want to place the image as alphabet child to animate.

### Game Loop

1. Implemented waypoint navigation to interact throughout the game.
2. Game mechanism :
   * 1. Click on the alphabet to collect, then ~~3d model appears~~ and alphabet disappears. Because 2d models are used in the place of 3d models and attached 2d image with the alphabets.
     2. Implemented easy navigation to find the way by using waypoint navigation.
     3. Implemented collecting stars by clicking them
     4. Implemented total collected starts as points while user entered the house.
3. Implemented restart and exit applications.
4. ~~Alphabets dancing crazy.~~

In future will implement it but now  added alphabet sounds when pointer placed on the alphabet.

### Other Effects:

* 1. Mixed lighting ( directional lighting as real-time and remaining lighting as baked)

Directional light as real-time lighting, area light and spotlights are implemented as baked lighting to do mixed lighting

* 1. Particle effects added to stars, alphabets and waypoints.
  2. Added sounds for alphabets and waypoints.
  3. ~~Rewards like showering stars or any other particle effects~~

In Future will try to implement particle effects by showering them on the user after reaching the end of the maze.

* 1. ~~Video player with playing alphabet song in the house in TV~~

In future there is a scope to add video player