# **Subsystems**

# GoDot Game Engine

## Input

Mouse and keyboard

## Output

User interface, user experience and functionality

## Process

Implemented using GoDot Game Engine

# Facebook API for authentication

## Input

Email, password

## Output

On Success: accessToken, name, email, userID   
if character profile not found   
 Show the Select Character window to create the character  
else   
 World Selection window will appear.

## Process

Implemented using GoDot's HTTPClient to send request

# MySQL Database

## Input

Front end to call API endpoint

## Output

Depending on which endpoint is called, it will follow the CRUD functionality:

* Create a new entry
* Reading an existing entry
* Update a new entry
* Delete an existing entry

## Process

Implemented using GoDot's HTTPClient to send request

# View Analytic via Leader Board 1

## Input

Users trigger the event (mouse click) to view the World Leader Board

## Output

A Leader Board window will appear that shows:

* Average score for the world
* Average score for each section (level)

## Process

Function call to obtain the world information  
Function call to render the window display

# View Analytic via Leader Board 2

## Input

Users trigger the event (mouse click) to view the detail analytics for each section of the Leader Board

## Output

A Leader Board window will appear that shows:

* Average score for that section
* Number of people that have played that section
* The average score for that question with the difficulties level associated

## Process

Function call to obtain that respective section info  
Function call to render the window display

# Players attempting the level

## Input

Users trigger the event (mouse click) on various options available for that question

## Output

A leader board window will appear that shows:

* Average score for that section
* Number of people that have played that section
* The average score for that question with the difficulties level associated

Process  
Function call to validate the selected option  
Function call to update the score accordingly

# Saving the Player score

## Input

When the game is completed, either due to the Timer ended or Player had attempted all the question

## Output

Player score is saved to the database   
The home screen (World selection will appear)

## Process

Function call to save the data into database

# Selecting the Game world and section

## Input

Users trigger the event via mouse click to first select the world (Mod) follow by the section(level)

## Process

Function call to load the world selection   
Function call to load the level section   
Function call to load the questionnaire for the selected level

Output

Screen window to commence the game will appear

# Creating the Level

## Input

Users trigger the level creation via mouse click.  
Upon mouse clicked. User will then enter the level (Questionnaire) and the level name.

Output

On Success

World Selection window will appear   
Else   
 An error message will appear

Process  
Function called to save the level and its corresponding questionnaire into the Question bank (database)

# Selecting the Player Character

## Input

Users trigger the event via mouse click to select which character they prefer

Output

World selection window will appear.

## Process

Function call to save the selected character option and its corresponding account to the database