## **Implementation - Part B**

## 1) Third-Party Libraries and Assets Used:

- (a) LibGDX: The core game development framework that provides tools for handling graphics, user input, and managing the game lifecycle.
- (b) External Images: This project used four external images, each in PNG format. The purpose of images used for <u>House</u>, <u>Lecture Hall</u>, <u>Cafe</u> and <u>Sport Building</u>(Recreational Building/Event).

## 2) Licence Information and Suitability:

- (a) LibGDX Apache License 2.0: The licence is well-suited for our non-commercial academic project. It allows free use, modification, and testing without licensing fees.
- (b) External Images: The images used in this project are obtained under a permissive licence that allows both **personal and commercial use**. Also allows for **unlimited number of times** and perpetually.

## 3) <u>Unimplemented or Partially Implemented Features(Assessment 1):</u>

- (a) Partially Implemented Requirements:
  - UR\_THREE\_EVENTS (FR\_POS\_EVENT, FR\_NEG\_EVENT, FR\_NTRL\_EVENT): Only the positive event is implemented(sport building).
  - FR\_REACT (UR\_REACT\_TO\_EVENT): Users can react to some events, but not all event types provide multiple choices yet.
  - FR\_DISPLAY\_SCORE (UR\_SS\_SCORE): Displaying user satisfaction score has not been fully designed yet.
  - UR\_PLACE\_ACTIVITY (FR\_PLACE\_ACTIV): Only the placement of sports centres is implemented; other activity areas remain unimplemented.
- (b) Unimplemented requirements:
  - **UR\_PAUSE** (**FR\_PAUSE**, **NFR\_AUDITABILITY**): Game pausing and progress saving are not functional.
  - NFR\_ACCESSIBLE, NFR\_USABILITY: Accessibility enhancements and usability improvements have not been tested or implemented.
  - FR\_BUILD\_TIME: Building placement currently is not implemented.
  - UR\_SS\_SCORE: The student satisfaction scoring system is not implemented.
  - FR\_ERROR: Error messages are not implemented when building in a restricted area.
  - FR\_PLACE\_CONFIRMATION: Confirmation not provided after placing a building.
- (c) Fully Implemented Requirements:
  - UR\_CHOOSE\_PLACE: Users can choose where to place buildings.
  - UR\_PLACE\_FOOD, UR\_PLACE\_SLEEP, UR\_PLACE\_STUDY: Users can place specific types of buildings (cafe, house, lecture hall).
  - FR\_DURATION: Game duration limit is implemented.