

**Implementation**

**Cohort 2 Team 1**

Ahmet Abdulhamit

Zoey Ahmed

Tomisin Bankole

Alanah Bell

Sasha Heer

Oscar Meadowcroft

Alric Thilak

## Working Implementation

A fully functional prototype of Escape from University has been implemented in LibGDX using object-oriented architecture. The game includes:

- Core gameplay: player movement with collision detection (FR\_MOVEMENT), Dean AI antagonist (FR\_ANTAGONIST) and three event types:
  - .Positive event: lockers that grant a temporary speed boost from an item found inside (FR\_POSITIVE\_EVENT)
  - .Negative event: being caught by the dean resets the player (FR\_NEGATIVE\_EVENT)
  - .Hidden event: a hidden bus ticket must be found to complete the game (FR\_HIDDEN\_EVENT)
- UI systems: real time event counters (UR\_EVENTS), 5-minute timer (FR\_USER\_TIME), scoring with penalties included (FR\_END\_SCORE), screen management (Menu, Tutorial, Game, Win, Game Over)
- Architecture: GameScreen coordinator pattern with entity classes (Player, Dean, Locker, BusTicket) and LibGDX screen management
- The executable JAR includes all dependencies, providing complete offline functionality (FR\_OFFLINE)

## Third-Party Assets and Licenses:

Asset	License	Usage
Cute Fantasy Free Tileset	Non-commercial	Maze tile sets
Modern Interiors Free v2.2	Non-commercial	Building interior decoration assets
Mystic Woods Free v2.2	Non-commercial	Environmental assets
BUS TOPDOWN (Vecteezy)	Standard license	Bus sprite
Tiled Map Editor	GPL v2+	Map creation tool supported by LibGDX
Skin Composer	MIT License	UI skin generator
LibGDX Framework	Apache 2.0	Game development framework

All licenses are suitable for this academic, non-commercial project. No assets require commercial licensing or violate terms of use.

## Unimplemented Features:

- **Audio:** no music (FR\_UX\_MUSIC, NFR\_MUSIC\_CONTROL) or sound effects (NFR\_SOUND\_EFFECTS\_CONTROL)
- **Accessibility:** colourblind mode not implemented (UR\_SETTINGS, FR\_SETTINGS\_OPTION)
- **UI Polish:** basic pause exits but a full settings menu is not implemented (UR\_SETTINGS, FR\_SETTINGS\_OPTION)
- **Exit flows:** no confirmation screens (NFR\_EXIT\_GAME\_SCREEN, NFR\_RESTART\_GAME\_SCREEN)