Implementation

Cohort 1 Group 8

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3rd Party Libraries
The library that was the basis for our implementation was the libGDX library (https://libgdx.com/). It provided crucial functionality for rendering the game and handling logic - it was absolutely necessary for our project. LibGDX is open source, meaning that we were free to use it as we pleased. We used this in combination with the open source Gradle Build Tool (https://gradle.org/) to build our game.

Although most art assets were made by Andrew using an open source pixel art application called Aseprite, we also used multiple assets from sites such as itch.io. We made sure that every asset that we found online was free for personal and commercial use. Some of these assets do require accreditation, so we provided a list of used assets on our website to ensure we fulfilled this.

Our used 3rd party assets include:
The tiles for our map background (https://cainos.itch.io/pixel-art-top-down-basic)
Our background music (https://tallbeard.itch.io/music-loop-bundle)
Our road tiles (https://kenney-assets.itch.io/rpg-urban-kit)
Our bus sprite (https://minzinn.itch.io/pixelvehicles)
Our accommodation sprite (https://adamatomic.itch.io/gallet-city)
Various sounds on https://freesound.org/ - These didn't require accreditation.

Requirements Review
For the most part, we stuck to our requirements and fulfilled the project brief for part 1 of the assessment. We started implementation relatively early and spent a lot of time making sure that there was sufficient content in the game and that our requirements were met. We didn't expect to have time to finish all of our minigames, but we ended up doing so.

FR_IRREGULAR_EATING: To avoid making the player spend lots of time eating during the day, we decided to only require the player to eat once a day, which doesn't exactly equate to regular eating as they can eat at any point during the day and eating once a day isn't representative of reality. However, we did implement a penalty system to the player's energy for not eating on a day and for overeating on a day. We found that this approach suited the style of the game more and helped us to stay within our time limit.

FR_DISABILITIES: We did not have enough time to review our game through the lens of accessibility, so there may well be certain aspects of the game that may be difficult for users with disabilities. For example, someone who is colourblind may have trouble navigating the map, as inaccessible areas are mainly distinguished via colour. We did however try our best in development to account for this, for instance keeping font size relatively large and changing sprites in games to not make them unplayable for colourblind people.

NFR_GAME_TIME: Although our game falls roughly within the given timeframe, it is possible that a new player going at a slower pace could take longer than 10 minutes to complete a run of the game. Although we tried very hard to minimise the time requirement of our minigames, they did contribute heavily to this. However, we believe that going slightly over the time limit was still a worthwhile tradeoff for the quality increase by adding minigames.