

## Implementation

### 6b:

#### 3rd Party Libraries and Assets:

LibGDX is an open source framework of libraries used for 2D game development in Java. We used it as it is one of the most common frameworks for this purpose, and as a result it is well documented, with plenty of tutorials and online communities available to aid our development. Additionally, we felt it was appropriate to our project due to its tools designed specifically for creating 2D games, such as the support for TMX tile maps, which we used in creating the layout of the kitchen and its contactlistener feature for hit detection. Additionally, away from the implementation, we also felt that LibGDX was suitable because of its cross platform API, which meant we could all work on the code and run it, despite some of us being on different operating systems.

We also used a series of sprites and tiles from various sources. We got the chef sprite from [Opengameart.org](http://Opengameart.org), which is a website that provides assets for free use in games. This was ideal for us as it minimises costs. Many miscellaneous assets used in the game are from the Modern Interiors pack by Limezu (<https://limezu.itch.io/moderninteriors>). This also provided important UI elements. Additionally, we used the Kitchen Interiors pack by Reakain at <https://reakain.itch.io/kitchen-assets>. This pack was particularly useful to us due to its focus on kitchens. Finally, the kitchen cabinets seen in the game which are used as stations are from Ayene-Chan on DeviantArt.

#### Licences:

- LibGDX is licensed under the Apache 2 licence. This licence is very permissive and means that it is possible to view and modify the source code, and that the library can be freely used for any purpose. It also means that we are able to freely distribute any software created using the Apache licenced LibGDX framework. This is suitable as we may even view the source code to further understand how it works.
- The chef sprite is licensed under Creative Commons 0, which is public domain. The sprite is free to use without permission or credit. This is useful to us as using freely licensed assets lowers our costs for the small scale project.
- Modern Interiors is licensed such that we may use and modify any assets, but may not resell or distribute assets elsewhere. Credit must also be provided at this link: <https://limezu.itch.io/>. This is suitable to us as it is far easier to use appropriately licensed assets than to create them ourselves, especially given the time scale.
- Kitchen Assets is licensed such that we may modify and use the assets in free or commercial settings, but must not distribute them elsewhere. Credit is not required. This is again similarly suitable to us as the other asset packs discussed so far.
- The cabinets are licensed under Creative Commons Attribution 3.0, which states that we may freely use the assets, but must provide credit to the artist, which is available at <https://www.deviantart.com/ayene-chan>. Again, using freely available assets is economical to use, both in lowering costs and lowering the time spent creating/finding assets.

#### Requirements not fully implemented:

No burger flipping mechanic, no onion, inventory not fully implemented, no proper exit screen.