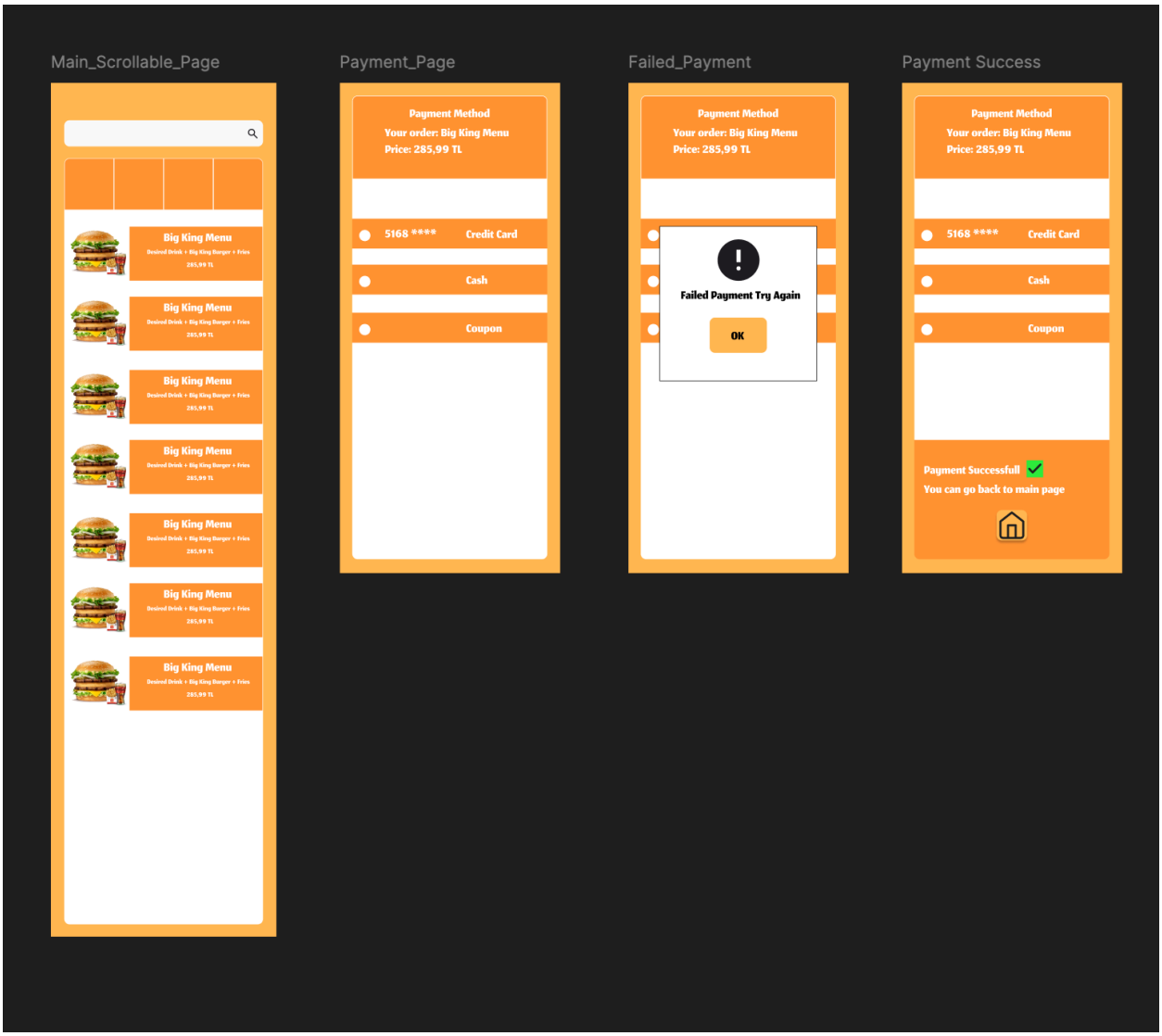
Week-1

Day-1

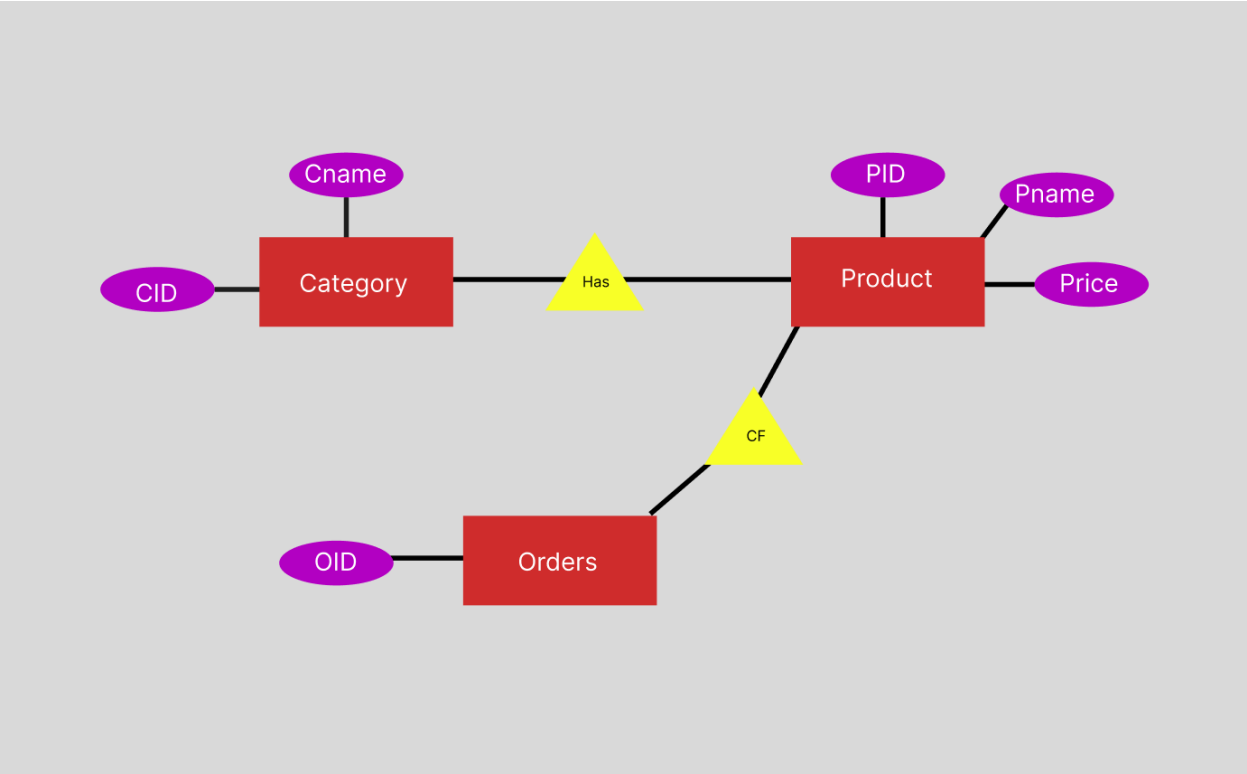
I designed the overall layout of the project on Figma.

https://www.figma.com/design/fnHCgcXtSB6N3x3ogGptQX/app_design?t=lDKzonSNWRm6IsxO-0



After the design I decided on the DB structure and created a Relational Model Diagram.

https://www.figma.com/design/xfttypk7pkmZrzDZFaBcmT/Relational_Model_Diagram?t=lDKzonSNWRm6IsxO-0



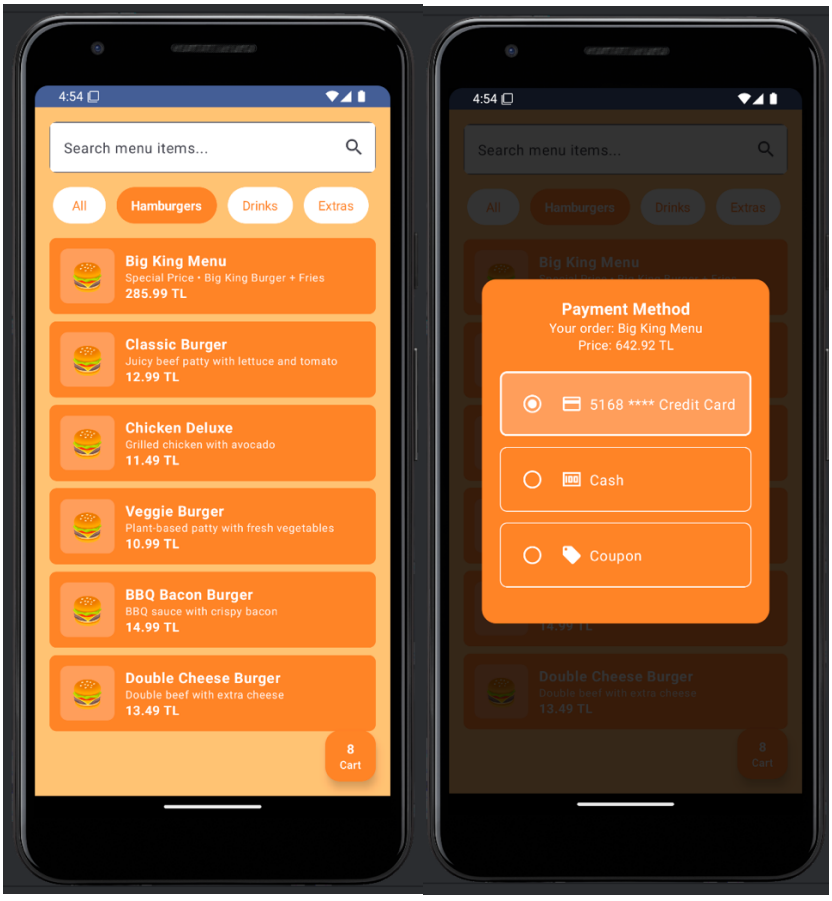
Finally at the end of day 1, I created a Mobile App structure without the web service and SQL. Therefore I used data classes on Kotlin and used Mock Data.

I opened an Empty Project on Android studio and added 3 files and classes.

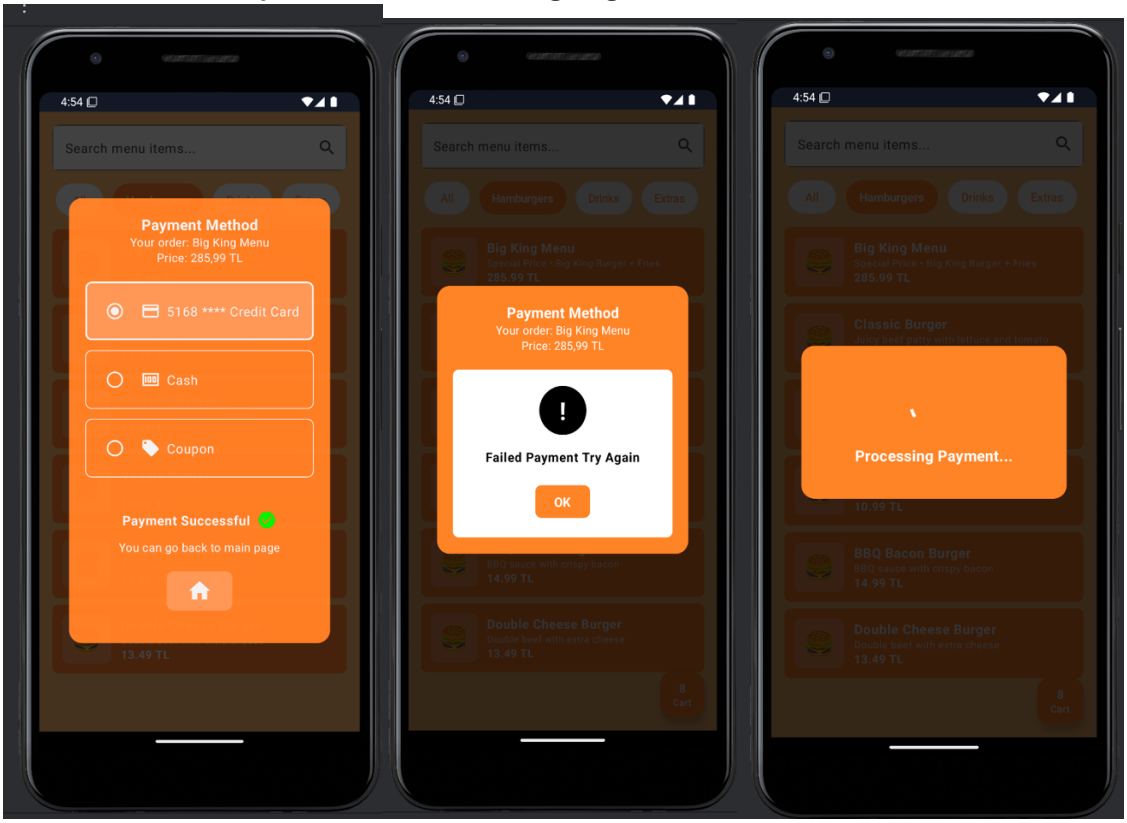
FoodModels.kt (which is under models package)
MainScreen.kt (under ui.theme)
PaymentDialogs.kt (under ui.theme)

https://github.com/ewok0116/internshiptemplate/tree/main/projects/Frontend/foodorderingapp

Payment and Selection Page



Success, Failed Payment and Processing Pages



What I need to do in terms of Kotlin?

After DB processes are complete, I need to change the mock data and also on payment selection page only credit card is selected I also need to change that and depending on feedback the successful payment page might stay still instead of automatically leading to selection page.

Day-2

I got feedback on fixing and adding some features to the app

- Cart button should be bigger
- There should be a Dialog that shows products, and they should be deletable or incrementable
- There should be toast or toast like structure that appears after adding products to the bar (I used snackbar)

- More payment methods should be added
- Navigating back to home page should be manual
- The text of payment successful dialog should be fixed
- Build variant like theme structure should be made
- If wanted, a receipt should appear after the payment

I did fix the issues and added the wanted features to the application.
Only this one is still in progress

- Design patterns should be searched

In terms of Build Variant

Build Configuration (build.gradle)

```
flavorDimensions += "company"
productFlavors {
    create("companyA") {
        dimension = "company"
        applicationIdSuffix = ".companya"
        versionNameSuffix = "-companyA"
        manifestPlaceholders["appName"] = "Company A Food"
        buildConfigField("String", "COMPANY_THEME", "\"ORANGE\"")
    }

    create("companyB") {
        dimension = "company"
        applicationIdSuffix = ".companyb"
        versionNameSuffix = "-companyB"
        manifestPlaceholders["appName"] = "Company B Food"
        buildConfigField("String", "COMPANY_THEME", "\"GREEN\"")
    }
}
```

Theme Provider (Theme.kt)

```
val LocalAppTheme = compositionLocalOf { ThemeManager.getCurrentTheme() }

@Composable
fun FoodOrderingAppTheme(content: @Composable () -> Unit) {
    val currentTheme = ThemeManager.getCurrentTheme()

    CompositionLocalProvider(
        LocalAppTheme provides currentTheme
```

```
    ) {
        MaterialTheme(content = content)
    }
}
```

Before (Hard-coded colors):

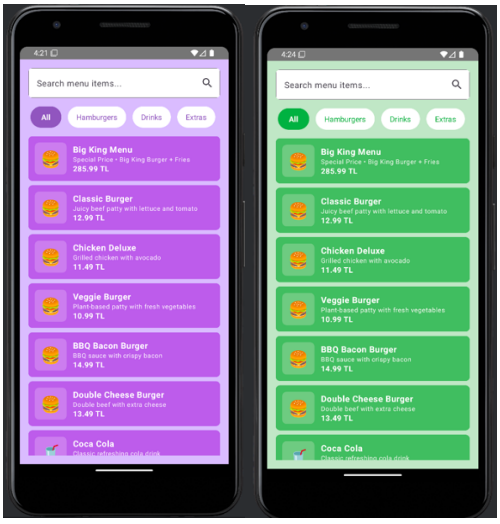
```
@Composable
fun ProductCard() {
    Card(
        colors = CardDefaults.cardColors(
            containerColor = Color(0xFFFF8C42) // Hard-coded orange
        )
    ) { /* content */ }
}
```

After (Dynamic colors):

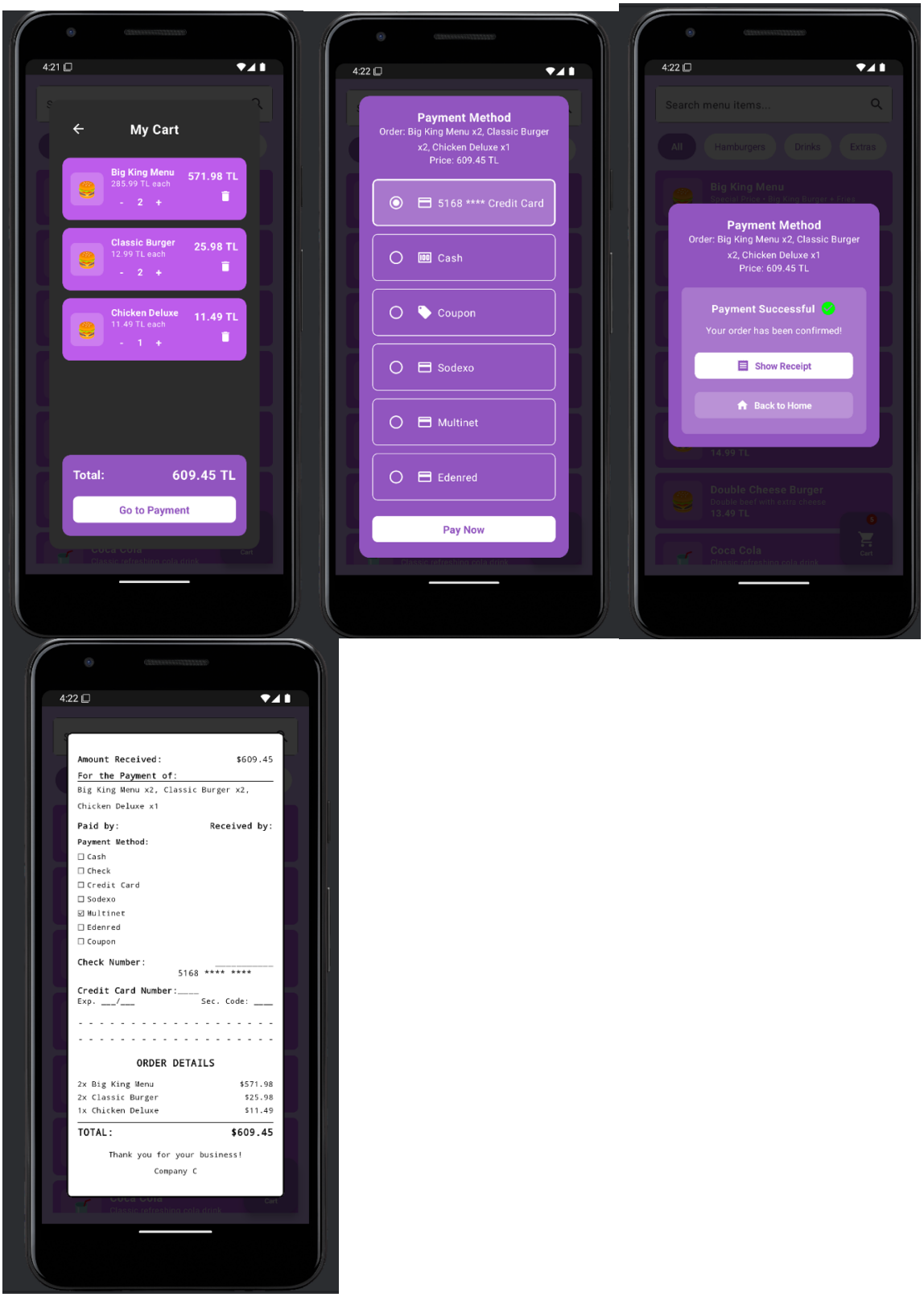
```
@Composable
fun ProductCard() {
    val theme = LocalAppTheme.current  // Get current theme

    Card(
        colors = CardDefaults.cardColors(
            containerColor = theme.cardColor  // Dynamic color!
        )
    ) { /* content */ }
```

And these are the new variants aside from orange



In addition, added receipt, cart dialog and more payment methods



Still I need to edit the receipt, and delete some of the texts. Moreover, need to study more about design patterns and the one I'm currently using which is MVC.

Day-3

I fixed Receipt, added multiple payment methods, make the payment screen non-cancellable, and got rid of randomization of payment success or fail. After that I studied design patterns and look into MVVM. Since, I realized that I was not using the pattern MVC but I was using MVVM (Model View Viewmodel). It has two-way data binding and views don't directly manipulate the data. After that I searched whether there were any better patterns that I can use if the project got bigger and there was. MVI (Model View Intent)

The MVVM was usable when there are approximately 10 pages. MVI is used in bigger and more complex projects. In addition both can be combined for usage aswell. For my project, since it is a small project I will be using MVVM but later on if a customer want their app to have an advanced carts that has promotion or discount like features. MVI would be a better design approach.

MVI Flow

User Action → Intent → ViewModel → New State → UI Update → User Action

MVVM Flow

User Action ← → ViewModel ← → UI (bidirectional)

Moreover, I finally fixed the GitHub branch error. In addition I did the homepage and config page.