SNACK SQUAD :A CUSTOMISIBLE SNACK ORDERING AND DELIVERY APP

PROJECT REPORT

Submitted by

EDWIN SAMUEL L(20203111506121)

CHIJIVU S S(20203111506119)

GIFTLIN B(20203111506123)

GODWIN L J(20203111506124)

CONTENTS

1. INTRODUCTION

1.1 OVERVIEW

The online food delivery is a service that allows the user to order food from a desired food outlet via the internet. This can be done either by going directly to the website and placing an order or by using a mobile phone application. The introduction of online food delivery system has been a convenient addition, which has not only reduced long queues, but has also decreased the waiting time for ordered food delivery. The online food delivery system has already been adopted throughout the globe and its performance has been relatively good.

The key players in the industry have been relying on partnerships and acquisition as the prominent strategies to help boost their growth in the market. The global online food market is driven by rise in internet penetration coupled with increase in the working population and surge in the food & beverage industry. The online food delivery market is also supplemented by growth in mobile phone dependency. However, unwillingness of big food outlets to adopt this system along with the potential technical and infrastructural issues hinder the growth of this market. Moreover, too much competition and lack of loyal customers also act as a threat to this market. Technological breakthroughs and infrastructural improvements, especially in the emerging nations are expected to drive the growth of the market in the future.

The global online food delivery market is segmented based on the delivery model and region. Based on delivery model, the market is segmented into the traditional delivery model, aggregators, and new delivery model. By region, the global online food delivery market is studied across North America, Europe, Asia-Pacific, and LAMEA.

Objective of project on Online Food Ordering System:

The main objective of the Project on Online Food Ordering System is to manage the details of Food Item, Category, Customer, Order, Confirm Order. It manages all the information about Food Item, Payment, Confirm Order, Food Item. The project is totally built at administrative end and thus only the administrator is guaranteed the access. The purpose of the project is to build an application program to reduce the manual work for managing the Food Item, Category, Payment, Customer. It tracks all the details about the Customer, Order, Confirm Order.

Functionalities provided by Online Food Ordering System are as follows:

- Provides the searching facilities based on various factors. Such as Food Item ,Customer, Order, Confirm Order
- Online Food Ordering System also manage the Payment details online for Order details, Confirm Order details, Food Item.
- It tracks all the information of Category, Payment, Order etc
- Manage the information of Category
- Shows the information and description of the Food Item, Customer
- To increase efficiency of managing the Food Item, Category
- It deals with monitoring the information and transactions of Order.
- Manage the information of Food Item
- Editing, adding and updating of Records is improved which results in proper resource management of Food Item data.
- Manage the information of Order
- Integration of all records of Confirm Order

1.2 PURPOSE

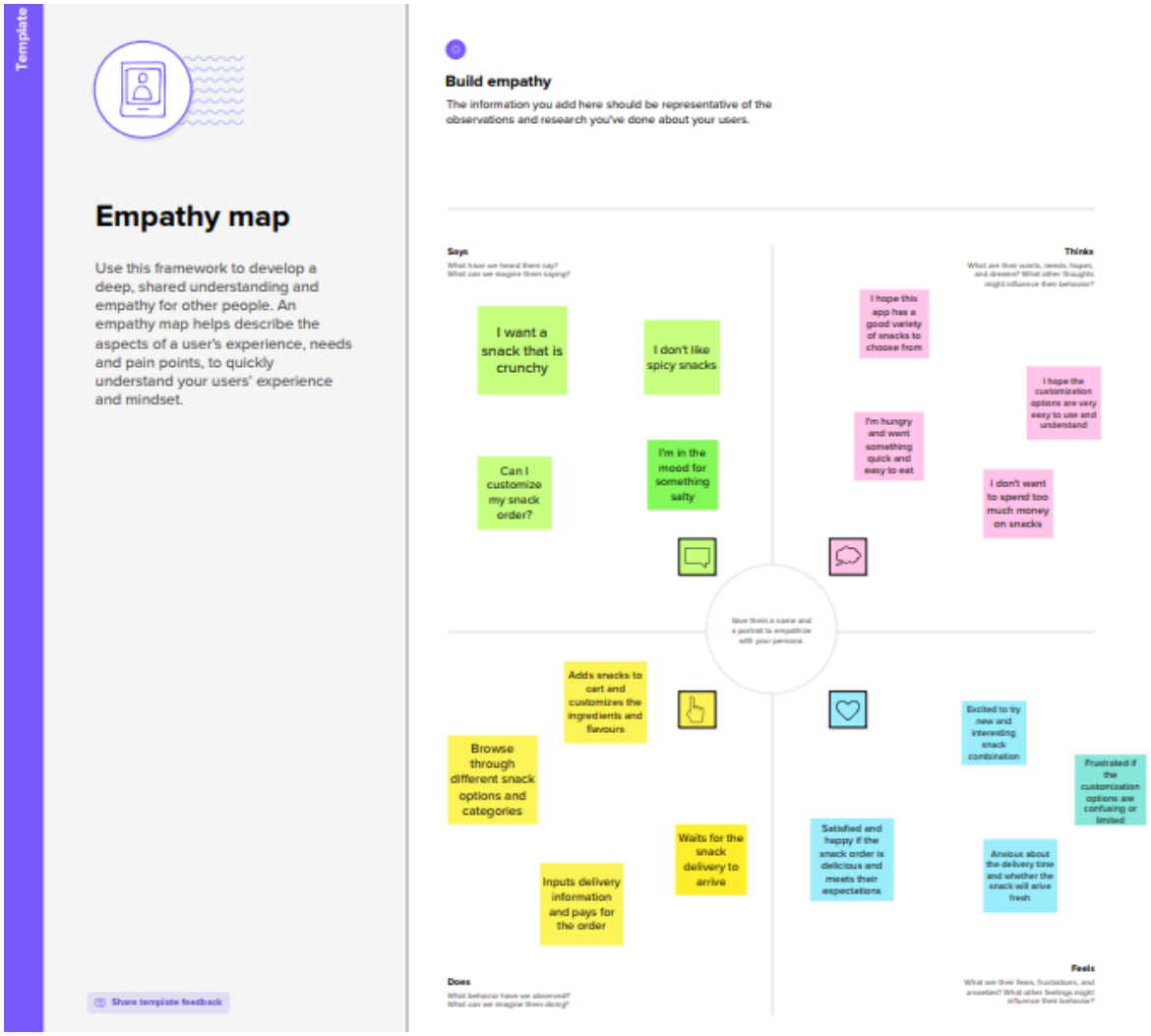
The purpose of Online food ordering system is to automate the existing manual system by the help of computerized equipment's and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with.

Online food ordering system, as described above, can lead to error free, secure, reliable and fats management system. It can assist the user to concentrate on the record keeping. Thus it will help organization in better utilization of resources. The organization can maintain computerized records without redundant entries. That means that one need not be distracted by information that is not relevant, while being able to reach the information.

The aim is to automate its existing manual system by the help of computerized equipment's and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. Basically, the project describes how to manage for good performance and better services for the clients.

2. PROBLEM DEFINITION AND DESIGN THINKING

2.1 EMPATHY MAP



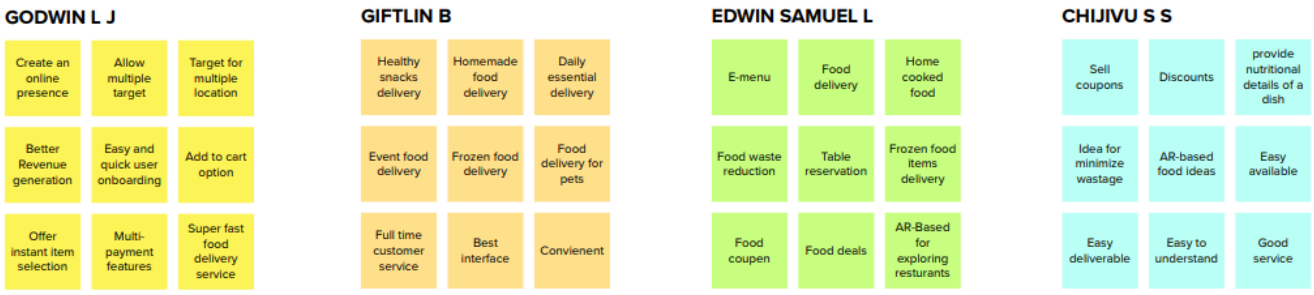
2.2 IDEATION AND BRAINSTORMING MAP

2

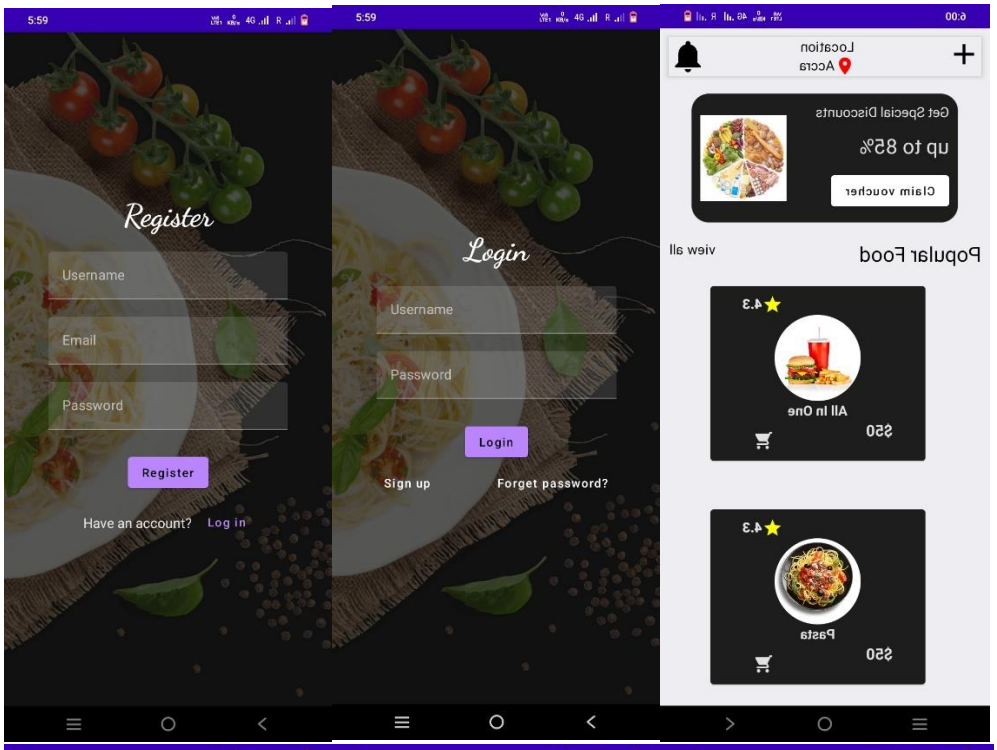
Brainstorm solo

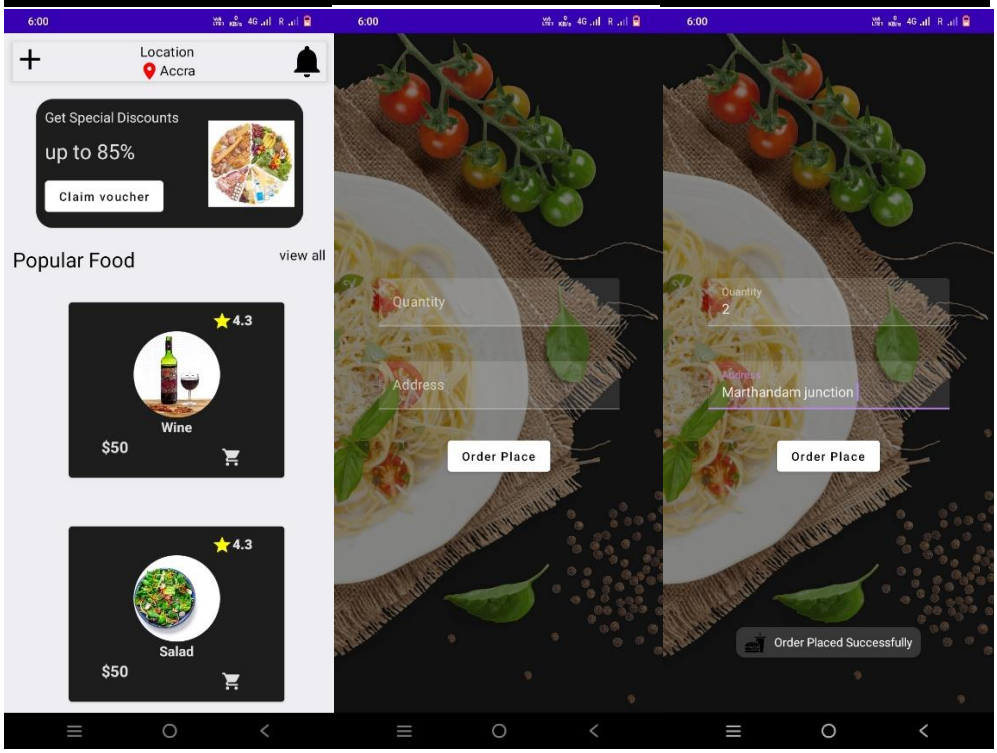
Have each participant begin in the "solo brainstorm space" by silently brainstorming ideas and placing them into the template. This "silent-storming" avoids group-think and creates an inclusive environment for introverts and extroverts alike. Set a time limit. Encourage people to go for quantity.

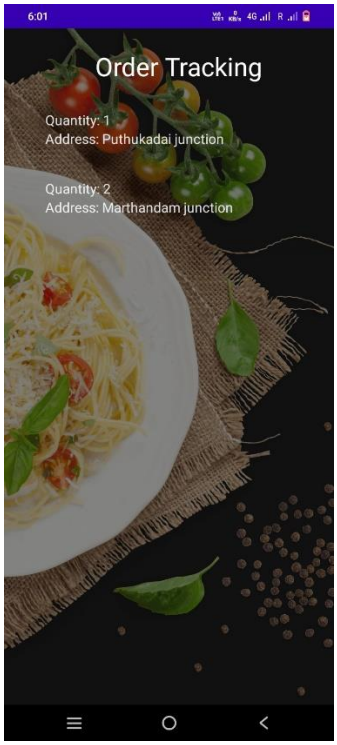
10 minutes



3. RESULT


5:59
Register
Username
Email
Password
Register
Have an account? Log in
5:59
Login
Username
Password
Login
Sign up
Forget password?
6:00
Location
Accra
Get Special Discounts
up to 85%
Claim voucher
Popular Food
view all
4.3
All In One
$50
4.3
Pasta
$50


6:00
Location
Accra
Get Special Discounts
up to 85%
Claim voucher
Popular Food
view all
4.3
Wine
$50
4.3
Salad
$50
6:00
Quantity
Address
Order Place
6:00
Quantity
2
Address
Marthandam junction
Order Place
Order Placed Successfully


6:01
Order Tracking
Quantity: 1
Address: Puthukadai junction
Quantity: 2
Address: Marthandam junction

4. ADVANTAGES AND DISADVANTAGES

ADVANTAGES

Convenience

Customers can order their favourite comfort food from the couch while bingeing the latest Netflix show and having it delivered to their front door. Sounds amazing, right? That's because it is, and the convenience attracts many different types of customers, not just millennials. Parents with no time to cook can utilize online food delivery and feed the whole family without turning on the oven. The convenience offered by online food delivery services is the greatest appeal.

Discover New Restaurants & New Customers

More restaurants are joining the ranks of the online food delivery community every day, allowing customers a greater selection of foods to choose from when ordering. Instead of a customer being confined to restaurants around their home or one that only attracts nearby residents, customers can now discover new restaurants. Connecting restaurants to new customers is one of the best benefits for the industry and also allows customers be a little adventurous and try a new spot.

Healthier Delivery Options

Online ordering means more choices. Now customers can order a smorgasbord of delicious culinary options from their favourite local eateries, even healthy options. Want to skip chicken wings and order grilled chicken with steamed vegetables instead? It's possible. Need a salad instead of scarfing down a burger and fries? Do it. Online food delivery services are enabling customers to stick to healthy eating plans even when they want to forego meal prep or dining out.

Avoid Weather Delays

Harsh weather can be devastating to a restaurant's bottom line. Customers stay cooped up indoors to avoid the elements, and restaurants remain emptier than usual due to the lack of customers. The advent of online food delivery services has allowed restaurants and customers to connect even when facing unfavourable weather. Restaurants can field steady business and customers stay well fed. Everyone stays dry, except the delivery driver.

DISASVANTAGES

Wait Times

Ordering from online food delivery services is not a quick experience. Customers in search of quick food should probably make the trip to the restaurant themselves rather than contact delivery services. Longer wait times for online food delivery can often be attributed to traffic, weather, how busy a restaurant is and the complexity of a customer's order. Does a customer want to wait an extra half hour (or even an hour) just to have their food delivered? Customers should pick up their food themselves if their hunger cannot wait.

Killing the Vibe

Ever been to an empty restaurant? It's a strange environment when dining alone or with only a few other customers. Part of the allure of many restaurants is the atmosphere. Customers can grill a steak or cook a pizza at home, but they love the vibe some restaurants offer. Every online food delivery service order equates to one less customer physically dining in the restaurant. While online ordering can generate similar or greater amounts of sales, at what point does operating a mostly empty restaurant begin to kill the spot's vibe and eat away at a restaurant's social capital?

More Expensive

Customers are typically subject to fees when ordering through an online delivery service, in addition to the cost of the food. These fees can include

a booking fee, busy area fees and even a tip to the delivery driver. Is a burrito worth a few extra dollars just to have it delivered?

Isolated Disconnect

Dining at a restaurant is an exciting and delicious experience, meant to be shared with family and friends. Consumers lose the restaurant ambiance and dining interaction when opting to utilize an online food delivery service. Eating in solitude with only your favourite streaming shows to accompany you (another topic for a different blog post) fosters an attitude of isolationism, slowly disconnecting you from the outside world

5. APPLICATION

The use of " A Customisable Snack Ordering and Delivery App" can be a convenient one that can be used in many application areas. That can be done by using mobile phones. We can implement it in on theaters as much as possible to reduce the time and work done. We can also apply this in small retailer shops and also in big retailers to makes them so fast and convenient and easy to maintanable one.

Snack Ordering App can be applicable in many real time usage for the snack delivery at any place that the range of the application that has been designed.

6.CONCLUSION

Our project is only a humble venture to satisfy the needs to manage their project work. Several user friendly coding have also adopted. This package shall prove to be a powerful package in satisfying all the requirements of the school. The objective of software planning is to provide a frame work that enables the manger to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses.

This project contains three parts, Background Management Platform, Website Public Page and Android Application. The Background Management Platform was implemented with Kotlin, XML and JPA framework. Website Public Page was achieved with Servlet/JSP and JavaBean. The Android framework was used in the Android Application. This project was a typical combination between a website and an Android application. The aim of the project was to help the restaurant owner to improve the efficiency of managing, meanwhile, help the customer to purchase snacks in different platforms easily. By now, the core function of this project has been implemented. The owner and

employees in the company can manage snack and handle snack orders and so on. On the public page, customers can view snack information and purchase snacks. Also, the customer can order snacks from the Android platform. Developing the application made it possible to learn and practice the whole processes of agile development with Android studio frameworks as well as Android framework.

7. FUTURE SCOPE

In a Android Studio using Kotlin, it can be summarized that the future scope of the project circles around maintaining information regarding:

🕐We can add printer in future.

🕐We can give more advance software for Online Snack Ordering System including more facilities.

🕐We will host the platform on online servers to make it accessible worldwide.

🕐Integrate multiple load balancers to distribute the loads of the system

🕐Create the master and slave database structure to reduce the overload of the database queries.

🕐Implement the backup mechanism for taking backup of code base and database on regular basis on different servers.

The above-mentioned points are the enhancements which can be done to increase the applicability and usage of this project. Here we can maintain the records of Snack Item and Category. Also, as it can be seen that now-a-days the players are versatile, i.e. so there is a scope for introducing a method to maintain the Online Food Ordering System. Enhancements can be done to maintain all the Snack Item, Category, Customer, Order, Confirm Order.

We have left all the options open so that if there is any other future requirement in the system by the user for the enhancement of the system then it is possible to implement them. In the last we would like to thanks all the persons involved in the development of the system directly or indirectly. We hope that the project will serve its purpose for which it is develop there by underlining success of process.

8.APPENDIX

SOURCE CODE

CREATING DATABASE CLASSES

Database 1 (Create User Data Class)

```
package com.example.snackordering

import androidx.room.ColumnInfo
import androidx.room.Entity
import androidx.room.PrimaryKey

@Entity(tableName = "user_table")
data class User(
    @PrimaryKey(autoGenerate = true) val id: Int?,
    @ColumnInfo(name = "first_name") val firstName: String?,
    @ColumnInfo(name = "last_name") val lastName: String?,
    @ColumnInfo(name = "email") val email: String?,
    @ColumnInfo(name = "password") val password: String?,

    )
```

Create An UserDao Interface

```
package com.example.snackordering

import androidx.room.*

@Dao
interface UserDao {

    @Query("SELECT * FROM user_table WHERE email = :email")
    suspend fun getUserByEmail(email: String): User?

    @Insert(onConflict = OnConflictStrategy.REPLACE)
    suspend fun insertUser(user: User)

    @Update
    suspend fun updateUser(user: User)

    @Delete
    suspend fun deleteUser(user: User)
}
```

Create An UserDatabase Class

```
package com.example.snackordering

import android.content.Context
import androidx.room.Database
import androidx.room.Room
import androidx.room.RoomDatabase

@Database(entities = [User::class], version = 1)
abstract class UserDatabase : RoomDatabase() {

    abstract fun userDao(): UserDao

    companion object {
```

```
            @Volatile
            private var instance: UserDatabase? = null

            fun getDatabase(context: Context): UserDatabase {
                return instance ?: synchronized(this) {
                    val newInstance = Room.databaseBuilder(
                        context.applicationContext,
                        UserDatabase::class.java,
                        "user_database"
                    ).build()
                    instance = newInstance
                    NewInstance
                }
            }
        }
    }
```

Create An UserDatabaseHelper Class

```
package com.example.snackordering

import android.annotation.SuppressLint
import android.content.ContentValues
import android.content.Context
import android.database.Cursor
import android.database.sqlite.SQLiteDatabase
import android.database.sqlite.SQLiteOpenHelper

class UserDatabaseHelper(context: Context) :
    SQLiteOpenHelper(context, DATABASE_NAME, null, DATABASE_VERSION) {

    companion object {
        private const val DATABASE_VERSION = 1
        private const val DATABASE_NAME = "UserDatabase.db"

        private const val TABLE_NAME = "user_table"
        private const val COLUMN_ID = "id"
        private const val COLUMN_FIRST_NAME = "first_name"
        private const val COLUMN_LAST_NAME = "last_name"
        private const val COLUMN_EMAIL = "email"
        private const val COLUMN_PASSWORD = "password"
    }

    override fun onCreate(db: SQLiteDatabase?) {
        val createTable = "CREATE TABLE $TABLE_NAME (" +
                "$COLUMN_ID INTEGER PRIMARY KEY AUTOINCREMENT, " +
                "$COLUMN_FIRST_NAME TEXT, " +
                "$COLUMN_LAST_NAME TEXT, " +
                "$COLUMN_EMAIL TEXT, " +
                "$COLUMN_PASSWORD TEXT" +
                ")"

        db?.execSQL(createTable)
    }
```

```
    override fun onUpgrade(db: SQLiteDatabase?, oldVersion: Int,
newVersion: Int) {
        db?.execSQL("DROP TABLE IF EXISTS $TABLE_NAME")
        onCreate(db)
    }

    fun insertUser(user: User) {
        val db = writableDatabase
        val values = ContentValues()
        values.put(COLUMN_FIRST_NAME, user.firstName)
        values.put(COLUMN_LAST_NAME, user.lastName)
        values.put(COLUMN_EMAIL, user.email)
        values.put(COLUMN_PASSWORD, user.password)
        db.insert(TABLE_NAME, null, values)
        db.close()
    }

    @SuppressLint("Range")
    fun getUserByUsername(username: String): User? {
        val db = readableDatabase
        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME WHERE
$COLUMN_FIRST_NAME = ?", arrayOf(username))
        var user: User? = null
        if (cursor.moveToFirst()) {
            user = User(
                id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                firstName =
cursor.getString(cursor.getColumnIndex(COLUMN_FIRST_NAME)),
                lastName =
cursor.getString(cursor.getColumnIndex(COLUMN_LAST_NAME)),
                email =
cursor.getString(cursor.getColumnIndex(COLUMN_EMAIL)),
                password =
cursor.getString(cursor.getColumnIndex(COLUMN_PASSWORD)),
            )
        }
        cursor.close()
        db.close()
        return user
    }
    @SuppressLint("Range")
    fun getUserById(id: Int): User? {
        val db = readableDatabase
        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME WHERE
$COLUMN_ID = ?", arrayOf(id.toString()))
        var user: User? = null
        if (cursor.moveToFirst()) {
            user = User(
                id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                firstName =
cursor.getString(cursor.getColumnIndex(COLUMN_FIRST_NAME)),
                lastName =
cursor.getString(cursor.getColumnIndex(COLUMN_LAST_NAME)),
                email =
cursor.getString(cursor.getColumnIndex(COLUMN_EMAIL)),
                password =
cursor.getString(cursor.getColumnIndex(COLUMN_PASSWORD)),
            )
        }
        cursor.close()
        db.close()
```

```
        return user
    }

    @SuppressLint("Range")
    fun getAllUsers(): List<User> {
        val users = mutableListOf<User>()
        val db = readableDatabase
        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME", null)
        if (cursor.moveToFirst()) {
            do {
                val user = User(
                    id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                    firstName =
cursor.getString(cursor.getColumnIndex(COLUMN_FIRST_NAME)),
                    lastName =
cursor.getString(cursor.getColumnIndex(COLUMN_LAST_NAME)),
                    email =
cursor.getString(cursor.getColumnIndex(COLUMN_EMAIL)),
                    password =
cursor.getString(cursor.getColumnIndex(COLUMN_PASSWORD)),
                )
                users.add(user)
            } while (cursor.moveToNext())
        }
        cursor.close()
        db.close()
        return users
    }

}
```

DATABASE 2

Create Order Data Class

```
package com.example.snackordering

import androidx.room.ColumnInfo
import androidx.room.Entity
import androidx.room.PrimaryKey

@Entity(tableName = "order_table")
data class Order(
    @PrimaryKey(autoGenerate = true) val id: Int?,
    @ColumnInfo(name = "quantity") val quantity: String?,
    @ColumnInfo(name = "address") val address: String?,
)
```

Create OrderDao Interface

```
package
com.example.snackordering
```

```
import androidx.room.*


@Dao
interface OrderDao {


    @Query("SELECT * FROM order_table WHERE  address=
:address")
    suspend fun getOrderByAddress(address: String): Order?


    @Insert(onConflict = OnConflictStrategy.REPLACE)
    suspend fun insertOrder(order: Order)


    @Update
    suspend fun updateOrder(order: Order)


    @Delete
    suspend fun deleteOrder(order: Order)
}
```

Create OrderDatabase Class

```
package
com.example.snackordering

import android.content.Context
import androidx.room.Database
import androidx.room.Room
import androidx.room.RoomDatabase

@Database(entities = [Order::class], version = 1)
abstract class OrderDatabase : RoomDatabase() {

    abstract fun orderDao(): OrderDao

    companion object {

        @Volatile
```

```
                private var instance: OrderDatabase? = null

                fun getDatabase(context: Context): OrderDatabase {
                    return instance ?: synchronized(this) {
                        val newInstance = Room.databaseBuilder(
                            context.applicationContext,
                            OrderDatabase::class.java,
                            "order_database"
                        ).build()
                        instance = newInstance
                        newInstance
                    }
                }
            }
        }
```

Create OrderDatabaseHelper Class

```
package com.example.snackordering

import android.annotation.SuppressLint
import android.content.ContentValues
import android.content.Context
import android.database.Cursor
import android.database.sqlite.SQLiteDatabase
import android.database.sqlite.SQLiteOpenHelper

class OrderDatabaseHelper(context: Context) :
        SQLiteOpenHelper(context, DATABASE_NAME, null,DATABASE_VERSION){

    companion object {
        private const val DATABASE_VERSION = 1
        private const val DATABASE_NAME = "OrderDatabase.db"

        private const val TABLE_NAME = "order_table"
        private const val COLUMN_ID = "id"
        private const val COLUMN_QUANTITY = "quantity"
        private const val COLUMN_ADDRESS = "address"
    }

    override fun onCreate(db: SQLiteDatabase?) {
        val createTable = "CREATE TABLE $TABLE_NAME (" +
                "${COLUMN_ID} INTEGER PRIMARY KEY AUTOINCREMENT, " +
                "${COLUMN_QUANTITY} Text, " +
                "${COLUMN_ADDRESS} TEXT " +
                ")"

        db?.execSQL(createTable)
    }

    override fun onUpgrade(db: SQLiteDatabase?, oldVersion: Int,
newVersion: Int) {
        db?.execSQL("DROP TABLE IF EXISTS $TABLE_NAME")
        onCreate(db)
    }
```

```
    fun insertOrder(order: Order) {
        val db = writableDatabase
        val values = ContentValues()
        values.put(COLUMN_QUANTITY, order.quantity)
        values.put(COLUMN_ADDRESS, order.address)
        db.insert(TABLE_NAME, null, values)
        db.close()
    }



    @SuppressLint("Range")
    fun getOrderByQuantity(quantity: String): Order? {
        val db = readableDatabase
        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME WHERE
$COLUMN_QUANTITY = ?", arrayOf(quantity))
        var order: Order? = null
        if (cursor.moveToFirst()) {
            order = Order(
                id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                quantity =
cursor.getString(cursor.getColumnIndex(COLUMN_QUANTITY)),
                address =
cursor.getString(cursor.getColumnIndex(COLUMN_ADDRESS)),
            )
        }
        cursor.close()
        db.close()
        return order
    }
    @SuppressLint("Range")
    fun getOrderById(id: Int): Order? {
        val db = readableDatabase
        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME WHERE
$COLUMN_ID = ?", arrayOf(id.toString()))
        var order: Order? = null
        if (cursor.moveToFirst()) {
            order = Order(
                id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                quantity =
cursor.getString(cursor.getColumnIndex(COLUMN_QUANTITY)),
                address =
cursor.getString(cursor.getColumnIndex(COLUMN_ADDRESS)),
            )
        }
        cursor.close()
        db.close()
        return order
    }

    @SuppressLint("Range")
    fun getAllOrders(): List<Order> {
        val orders = mutableListOf<Order>()
        val db = readableDatabase
        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME", null)
        if (cursor.moveToFirst()) {
            do {
                val order = Order(
                    id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
```

```
                    quantity =
cursor.getString(cursor.getColumnIndex(COLUMN_QUANTITY)),
                    address =
cursor.getString(cursor.getColumnIndex(COLUMN_ADDRESS)),
                )
                orders.add(order)
            } while (cursor.moveToNext())
        }
        cursor.close()
        db.close()
        return orders
    }

}
```

Building Application UI And Connecting To Database.

Creating LoginActivity.Kt With Database

```
package com.example.snackordering

import android.content.Context
import android.content.Intent
import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.Image
import androidx.compose.foundation.layout.*
import androidx.compose.material.*
import androidx.compose.runtime.*
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.layout.ContentScale
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.text.font.FontFamily
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import androidx.core.content.ContextCompat
import com.example.snackordering.ui.theme.SnackOrderingTheme

class LoginActivity : ComponentActivity() {
    private lateinit var databaseHelper: UserDatabaseHelper
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        databaseHelper = UserDatabaseHelper(this)
        setContent {
            SnackOrderingTheme {
                // A surface container using the 'background' color from
the theme
                Surface(
                    modifier = Modifier.fillMaxSize(),
                    color = MaterialTheme.colors.background
```

```
                ) {
                    LoginScreen(this, databaseHelper)
                }
            }
        }
    }
}
@Composable
fun LoginScreen(context: Context, databaseHelper: UserDatabaseHelper) {

    Image(painterResource(id = R.drawable.order), contentDescription = "",
        alpha =0.3F,
        contentScale = ContentScale.FillHeight,

    )

    var username by remember { mutableStateOf("") }
    var password by remember { mutableStateOf("") }
    var error by remember { mutableStateOf("") }

    Column(
        modifier = Modifier.fillMaxSize(),
        horizontalAlignment = Alignment.CenterHorizontally,
        verticalArrangement = Arrangement.Center
    ) {

        Text(
            fontSize = 36.sp,
            fontWeight = FontWeight.ExtraBold,
            fontFamily = FontFamily.Cursive,
            color = Color.White,
            text = "Login"
        )
        Spacer(modifier = Modifier.height(10.dp))

        TextField(
            value = username,
            onValueChange = { username = it },
            label = { Text("Username") },
            modifier = Modifier.padding(10.dp)
                .width(280.dp)
        )

        TextField(
            value = password,
            onValueChange = { password = it },
            label = { Text("Password") },
            modifier = Modifier.padding(10.dp)
                .width(280.dp)
        )

        if (error.isNotEmpty()) {
            Text(
                text = error,
                color = MaterialTheme.colors.error,
                modifier = Modifier.padding(vertical = 16.dp)
            )
        }

        Button(
            onClick = {
```

```
                if (username.isNotEmpty() && password.isNotEmpty()) {
                    val user = databaseHelper.getUserByUsername(username)
                    if (user != null && user.password == password) {
                        error = "Successfully log in"
                        context.startActivity(
                            Intent(
                                context,
                                MainPage::class.java
                            )
                        )
                        //onLoginSuccess()
                    }
                        if (user != null && user.password == "admin") {
                            error = "Successfully log in"
                            context.startActivity(
                                Intent(
                                    context,
                                    AdminActivity::class.java
                                )
                            )
                        }
                        else {
                            error =  "Invalid username or password"
                        }

                } else {
                    error = "Please fill all fields"
                }
            },
            modifier = Modifier.padding(top = 16.dp)
        ) {
            Text(text = "Login")
        }
        Row {
            TextButton(onClick = {context.startActivity(
                Intent(
                    context,
                    MainActivity::class.java
                )
            )}
            )
            { Text(color = Color.White,text = "Sign up") }
            TextButton(onClick = {
            })

            {
                Spacer(modifier = Modifier.width(60.dp))
                Text(color = Color.White,text = "Forget password?")
            }
        }
    }
}
private fun startMainPage(context: Context) {
    val intent = Intent(context, MainPage::class.java)
    ContextCompat.startActivity(context, intent, null)
}
```

Creating MainActivity.Kt With Database

```
package com.example.snackordering
```

```
import android.content.Context
import android.content.Intent
import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.Image
import androidx.compose.foundation.layout.*
import androidx.compose.material.*
import androidx.compose.runtime.*
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.layout.ContentScale
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.text.font.FontFamily
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import androidx.core.content.ContextCompat
import com.example.snackordering.ui.theme.SnackOrderingTheme

class MainActivity : ComponentActivity() {
    private lateinit var databaseHelper: UserDatabaseHelper
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        databaseHelper = UserDatabaseHelper(this)
        setContent {
            SnackOrderingTheme {
                // A surface container using the 'background' color from
the theme
                Surface(
                    modifier = Modifier.fillMaxSize(),
                    color = MaterialTheme.colors.background
                ) {

                    RegistrationScreen(this,databaseHelper)
                }
            }
        }
    }
}


@Composable
fun RegistrationScreen(context: Context, databaseHelper:
UserDatabaseHelper) {

    Image(
        painterResource(id = R.drawable.order), contentDescription = "",
        alpha =0.3F,
        contentScale = ContentScale.FillHeight,

        )

    var username by remember { mutableStateOf("") }
    var password by remember { mutableStateOf("") }
    var email by remember { mutableStateOf("") }
    var error by remember { mutableStateOf("") }

    Column(
```

```
        modifier = Modifier.fillMaxSize(),
        horizontalAlignment = Alignment.CenterHorizontally,
        verticalArrangement = Arrangement.Center
    ) {

        Text(
            fontSize = 36.sp,
            fontWeight = FontWeight.ExtraBold,
            fontFamily = FontFamily.Cursive,
            color = Color.White,
            text = "Register"
        )

        Spacer(modifier = Modifier.height(10.dp))
        TextField(
            value = username,
            onValueChange = { username = it },
            label = { Text("Username") },
            modifier = Modifier
                .padding(10.dp)
                .width(280.dp)

        )

        TextField(
            value = email,
            onValueChange = { email = it },
            label = { Text("Email") },
            modifier = Modifier
                .padding(10.dp)
                .width(280.dp)
        )

        TextField(
            value = password,
            onValueChange = { password = it },
            label = { Text("Password") },
            modifier = Modifier
                .padding(10.dp)
                .width(280.dp)
        )


        if (error.isNotEmpty()) {
            Text(
                text = error,
                color = MaterialTheme.colors.error,
                modifier = Modifier.padding(vertical = 16.dp)
            )
        }

        Button(
            onClick = {
                if (username.isNotEmpty() && password.isNotEmpty() &&
email.isNotEmpty()) {
                    val user = User(
                        id = null,
                        firstName = username,
                        lastName = null,
                        email = email,
                        password = password
```

```
                    )
                    databaseHelper.insertUser(user)
                    error = "User registered successfully"
                    // Start LoginActivity using the current context
                    context.startActivity(
                        Intent(
                            context,
                            LoginActivity::class.java
                        )
                    )

                } else {
                    error = "Please fill all fields"
                }
            },
            modifier = Modifier.padding(top = 16.dp)
        ) {
            Text(text = "Register")
        }
        Spacer(modifier = Modifier.width(10.dp))
        Spacer(modifier = Modifier.height(10.dp))

        Row() {
            Text(
                modifier = Modifier.padding(top = 14.dp), text = "Have an
account?"
            )
            TextButton(onClick = {
                context.startActivity(
                    Intent(
                        context,
                        LoginActivity::class.java
                    )
                )
            })

            {
                Spacer(modifier = Modifier.width(10.dp))
                Text(text = "Log in")
            }
        }
    }
}
private fun startLoginActivity(context: Context) {
    val intent = Intent(context, LoginActivity::class.java)
    ContextCompat.startActivity(context, intent, null)
}
```

Creating MainPage.Kt File

```
package com.example.snackordering

import android.annotation.SuppressLint
import android.content.Context
import android.os.Bundle
import android.widget.Toast
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.annotation.DrawableRes
```

```
import androidx.annotation.StringRes
import androidx.compose.foundation.Image
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.shape.CircleShape
import androidx.compose.foundation.shape.RoundedCornerShape
import androidx.compose.material.*
import androidx.compose.material.icons.Icons
import androidx.compose.material.icons.filled.*
import androidx.compose.runtime.Composable
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.draw.clip
import androidx.compose.ui.graphics.Color
import androidx.compose.foundation.lazy.LazyColumn
import androidx.compose.foundation.lazy.items
import androidx.compose.material.Text
import androidx.compose.ui.unit.dp
import androidx.compose.ui.graphics.RectangleShape
import androidx.compose.ui.layout.ContentScale
import androidx.compose.ui.platform.LocalContext
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.res.stringResource
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.unit.sp
import androidx.core.content.ContextCompat.startActivity
import com.example.snackordering.ui.theme.SnackOrderingTheme

import android.content.Intent as Intent1


class MainPage : ComponentActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContent {
            SnackOrderingTheme {
                // A surface container using the 'background' color from
the theme
                Surface(
                    modifier = Modifier.fillMaxSize(),
                    color = MaterialTheme.colors.background
                ) {
                    FinalView(this)
                    val context = LocalContext.current
                    //PopularFoodColumn(context)
                }
            }
        }
    }
}


@Composable
fun TopPart() {

    Row(
        modifier = Modifier
            .fillMaxWidth()
            .background(Color(0xffeceef0)), Arrangement.SpaceBetween
    ) {
        Icon(
```

```
            imageVector = Icons.Default.Add, contentDescription = "Menu
Icon",
            Modifier

                .clip(CircleShape)
                .size(40.dp),
            tint = Color.Black,
        )
        Column(horizontalAlignment = Alignment.CenterHorizontally) {
            Text(text = "Location", style =
MaterialTheme.typography.subtitle1, color = Color.Black)
            Row {
                Icon(
                    imageVector = Icons.Default.LocationOn,
                    contentDescription = "Location",
                    tint = Color.Red,
                )
                Text(text = "Accra" , color = Color.Black)
            }

        }
        Icon(
            imageVector = Icons.Default.Notifications, contentDescription =
"Notification Icon",

            Modifier
                .size(45.dp),
            tint = Color.Black,
        )
    }
}

@Composable
fun CardPart() {
    Card(modifier = Modifier.size(width = 310.dp, height = 150.dp),
RoundedCornerShape(20.dp)) {
        Row(modifier = Modifier.padding(10.dp), Arrangement.SpaceBetween) {
            Column(verticalArrangement = Arrangement.spacedBy(12.dp)) {
                Text(text = "Get Special Discounts")
                Text(text = "up to 85%", style =
MaterialTheme.typography.h5)
                Button(onClick = {}, colors =
ButtonDefaults.buttonColors(Color.White)) {
                    Text(text = "Claim voucher", color =
MaterialTheme.colors.surface)
                }
            }
            Image(
                painter = painterResource(id = R.drawable.food_tip_im),
                contentDescription = "Food Image", Modifier.size(width =
100.dp, height = 200.dp)
            )
        }
    }
}


@Composable
fun PopularFood(
    @DrawableRes drawable: Int,
    @StringRes text1: Int,
```

```
    context: Context
) {
    Card(
        modifier = Modifier
            .padding(top=20.dp, bottom = 20.dp, start = 65.dp)
            .width(250.dp)

    ) {
        Column(
            verticalArrangement = Arrangement.Top,
            horizontalAlignment = Alignment.CenterHorizontally
        ) {
            Spacer(modifier = Modifier.padding(vertical = 5.dp))
            Row(
                modifier = Modifier
                    .fillMaxWidth(0.7f), Arrangement.End
            ) {
                Icon(
                    imageVector = Icons.Default.Star,
                    contentDescription = "Star Icon",
                    tint = Color.Yellow
                )
                Text(text = "4.3", fontWeight = FontWeight.Black)
            }
            Image(
                painter = painterResource(id = drawable),
                contentDescription = "Food Image",
                contentScale = ContentScale.Crop,
                modifier = Modifier
                    .size(100.dp)
                    .clip(CircleShape)
            )
            Text(text = stringResource(id = text1), fontWeight =
FontWeight.Bold)
            Row(modifier = Modifier.fillMaxWidth(0.7f),
Arrangement.SpaceBetween) {
                /*TODO Implement Prices for each card*/
                Text(
                    text = "$50",
                    style = MaterialTheme.typography.h6,
                    fontWeight = FontWeight.Bold,
                    fontSize = 18.sp
                )

                IconButton(onClick = {

                    //var no=FoodList.lastIndex;
                    //Toast.
                    val intent = Intent1(context,
TargetActivity::class.java)
                    context.startActivity(intent)

                }) {
                    Icon(
                        imageVector = Icons.Default.ShoppingCart,
                        contentDescription = "shopping cart",
                    )
                }
            }
        }
    }
```

```
}



private val FoodList = listOf(
    R.drawable.sandwish to R.string.sandwich,
    R.drawable.sandwish to R.string.burgers,
    R.drawable.pack to R.string.pack,
    R.drawable.pasta to R.string.pasta,
    R.drawable.tequila to R.string.tequila,
    R.drawable.wine to R.string.wine,
    R.drawable.salad to R.string.salad,
    R.drawable.pop to R.string.popcorn
).map { DrawableStringPair(it.first, it.second) }

private data class DrawableStringPair(
    @DrawableRes val drawable: Int,
    @StringRes val text1: Int
)


@Composable
fun App(context: Context) {

    Column(
        modifier = Modifier
            .fillMaxSize()
            .background(Color(0xffeceef0))
            .padding(10.dp),
        verticalArrangement = Arrangement.Top,
        horizontalAlignment = Alignment.CenterHorizontally
    ) {
        Surface(modifier = Modifier, elevation = 5.dp) {
            TopPart()
        }
        Spacer(modifier = Modifier.padding(10.dp))
        CardPart()

        Spacer(modifier = Modifier.padding(10.dp))
        Row(modifier = Modifier.fillMaxWidth(), Arrangement.SpaceBetween) {
            Text(text = "Popular Food", style =
MaterialTheme.typography.h5, color = Color.Black)
            Text(text = "view all", style =
MaterialTheme.typography.subtitle1,  color = Color.Black)
        }
        Spacer(modifier = Modifier.padding(10.dp))
        PopularFoodColumn(context) // <- call the function with parentheses
    }
}



@Composable
fun PopularFoodColumn(context: Context) {

    LazyColumn(
        modifier = Modifier.fillMaxSize(),

        content = {
```

```
            items(FoodList) { item ->
                PopularFood(context = context,drawable = item.drawable,
text1 = item.text1)
                abstract class Context
            }
        },
        verticalArrangement = Arrangement.spacedBy(16.dp))
}


@SuppressLint("UnusedMaterialScaffoldPaddingParameter")
@Composable
fun FinalView(mainPage: MainPage) {
    SnackOrderingTheme {
        Scaffold() {
            val context = LocalContext.current
            App(context)
        }
    }
}
```

Creating TargetActivity.Kt

```
package com.example.snackordering

import android.content.Context
import android.content.Intent
import android.os.Bundle
import android.util.Log
import android.widget.Toast
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.Image
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.text.KeyboardActions
import androidx.compose.foundation.text.KeyboardOptions
import androidx.compose.material.*
import androidx.compose.runtime.*
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.layout.ContentScale
import androidx.compose.ui.platform.LocalContext
import androidx.compose.ui.platform.textInputServiceFactory
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.text.input.KeyboardType
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.core.content.ContextCompat
import com.example.snackordering.ui.theme.SnackOrderingTheme

class TargetActivity : ComponentActivity() {
    private lateinit var orderDatabaseHelper: OrderDatabaseHelper
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        orderDatabaseHelper = OrderDatabaseHelper(this)
        setContent {
            SnackOrderingTheme {
```

```
                // A surface container using the 'background' color from
the theme
                Surface(
                    modifier = Modifier
                        .fillMaxSize()
                        .background(Color.White)

                ) {
                    Order(this, orderDatabaseHelper)
                    val orders = orderDatabaseHelper.getAllOrders()
                   Log.d("swathi", orders.toString())

                }
            }
        }
    }
}

@Composable
fun Order(context: Context, orderDatabaseHelper: OrderDatabaseHelper){
    Image(painterResource(id = R.drawable.order), contentDescription = "",
        alpha =0.5F,
    contentScale = ContentScale.FillHeight)
    Column(
        horizontalAlignment = Alignment.CenterHorizontally,
        verticalArrangement = Arrangement.Center) {

        val mContext = LocalContext.current
        var quantity by remember { mutableStateOf("") }
        var address by remember { mutableStateOf("") }
        var error by remember { mutableStateOf("") }


        TextField(value = quantity, onValueChange = {quantity=it},
            label = { Text("Quantity") },
           keyboardOptions = KeyboardOptions(keyboardType =
KeyboardType.Number),
            modifier = Modifier
                .padding(10.dp)
                .width(280.dp))

        Spacer(modifier = Modifier.padding(10.dp))

        TextField(value = address, onValueChange = {address=it},
            label = { Text("Address") },
            modifier = Modifier
                .padding(10.dp)
                .width(280.dp))

        Spacer(modifier = Modifier.padding(10.dp))


        if (error.isNotEmpty()) {
            Text(
                text = error,
                color = MaterialTheme.colors.error,
                modifier = Modifier.padding(vertical = 16.dp)
            )
        }
```

```
        Button(onClick = {
            if( quantity.isNotEmpty() and address.isNotEmpty()){
                val order = Order(
                    id = null,
                    quantity = quantity,
                    address = address
                )
                orderDatabaseHelper.insertOrder(order)
            Toast.makeText(mContext, "Order Placed Successfully",
Toast.LENGTH_SHORT).show()}
        },
            colors = ButtonDefaults.buttonColors(backgroundColor =
Color.White))
        {
            Text(text = "Order Place", color = Color.Black)
        }


    }
}
private fun startMainPage(context: Context) {
    val intent = Intent(context, LoginActivity::class.java)
    ContextCompat.startActivity(context, intent, null)
}
```

Creating AdminActivity.Kt

```
package com.example.snackordering

import android.icu.text.SimpleDateFormat
import android.os.Bundle
import android.util.Log
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.Image
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.lazy.LazyColumn
import androidx.compose.foundation.lazy.LazyRow
import androidx.compose.foundation.lazy.items
import androidx.compose.material.MaterialTheme
import androidx.compose.material.Surface
import androidx.compose.material.Text
import androidx.compose.runtime.Composable
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.layout.ContentScale
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import com.example.snackordering.ui.theme.SnackOrderingTheme
import java.util.*

class AdminActivity : ComponentActivity() {
    private lateinit var orderDatabaseHelper: OrderDatabaseHelper
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        orderDatabaseHelper = OrderDatabaseHelper(this)
        setContent {
            SnackOrderingTheme {
```

```
                // A surface container using the 'background' color from
the theme
                Surface(
                    modifier = Modifier.fillMaxSize(),
                    color = MaterialTheme.colors.background
                ) {
                    val data=orderDatabaseHelper.getAllOrders();
                    Log.d("swathi" ,data.toString())
                    val order = orderDatabaseHelper.getAllOrders()
                    ListListScopeSample(order)
                }
            }
        }
    }
}

@Composable
fun ListListScopeSample(order: List<Order>) {
    Image(
        painterResource(id = R.drawable.order), contentDescription = "",
        alpha =0.5F,
        contentScale = ContentScale.FillHeight)
    Text(text = "Order Tracking", modifier = Modifier.padding(top = 24.dp,
start = 106.dp, bottom = 24.dp ), color = Color.White, fontSize = 30.sp)
    Spacer(modifier = Modifier.height(30.dp))
    LazyRow(
        modifier = Modifier
            .fillMaxSize()
            .padding(top = 80.dp),

        horizontalArrangement = Arrangement.SpaceBetween
    ){
        item {

            LazyColumn {
                items(order) { order ->
                    Column(modifier = Modifier.padding(top = 16.dp, start =
48.dp, bottom = 20.dp)) {
                        Text("Quantity: ${order.quantity}")
                        Text("Address: ${order.address}")
                    }
                }
            }
        }

    }
}
```

Modifying AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@drawable/fast_food"
        android:label="@string/app_name"
```

```
        android:supportsRtl="true"
        android:theme="@style/Theme.SnackOrdering"
        tools:targetApi="31">
        <activity
            android:name=".AdminActivity"
            android:exported="false"
            android:label="@string/title_activity_admin"
            android:theme="@style/Theme.SnackOrdering" />
        <activity
            android:name=".LoginActivity"
            android:exported="true"
            android:label="SnackSquad"
            android:theme="@style/Theme.SnackOrdering">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER"
/>
            </intent-filter>
        </activity>
        <activity
            android:name=".TargetActivity"
            android:exported="false"
            android:label="@string/title_activity_target"
            android:theme="@style/Theme.SnackOrdering" />
        <activity
            android:name=".MainPage"
            android:exported="false"
            android:label="@string/title_activity_main_page"
            android:theme="@style/Theme.SnackOrdering" />
        <activity
            android:name=".MainActivity"
            android:exported="false"
            android:label="MainActivity"
            android:theme="@style/Theme.SnackOrdering" />
    </application>

</manifest>
```