Source Code: Grocery App

1. build.gradle (project)

```
plugins {
  id 'com.android.application'
  id 'org.jetbrains.kotlin.android'
  id 'kotlin-android'
  id 'kotlin-kapt'
   }
android {
  compileSdk 33
  defaultConfig {
    applicationId "com.example.grocerryapp"
    minSdk 21
    targetSdk 33
    versionCode 1
    versionName "1.0"
    testInstrumentationRunner "androidx.test.runner.AndroidJUnitRunner"
  }
  buildTypes {
    release {
      minifyEnabled false
       proguardFiles getDefaultProguardFile('proguard-android-optimize.txt'), 'proguard-
rules.pro'
    }
  compileOptions {
    sourceCompatibility JavaVersion.VERSION_1_8
    targetCompatibility JavaVersion.VERSION_1_8
  }
```

```
kotlinOptions {
    jvmTarget = '1.8'
  }
  packagingOptions{
    exclude 'META_INF/atomicfu.kotlin_module'
 }
}
dependencies {
  implementation "androidx.room:room-ktx:2.4.3"
  implementation "androidx.lifecycle:lifecycle-viewmodel-ktx:2.5.1"
  implementation "androidx.lifecycle:lifecycle-livedata-ktx:2.5.1"
  implementation "androidx.lifecycle:lifecycle-common-java8:2.5.1"
  implementation "org.jetbrains.kotlin:kotlin-stdlib-jdk7:1.7.10"
  implementation "androidx.activity:activity-ktx:1.5.1"
  implementation 'androidx.core:core-ktx:1.9.0'
  implementation 'androidx.appcompat:appcompat:1.5.1'
  implementation 'com.google.android.material:material:1.6.1'
  implementation 'androidx.constraintlayout:constraintlayout:2.1.4'
  kapt "androidx.room:room-compiler:2.4.3"
  api "org.jetbrains.kotlinx:kotlinx-coroutines-core:1.6.1"
  api "org.jetbrains.kotlinx:kotlinx-coroutines-android:1.6.1"
  testImplementation 'junit:junit:4.13.2'
  androidTestImplementation "androidx.room:room-testing:2.4.3"
  androidTestImplementation "androidx.arch.core:core-testing:2.1.0"
  androidTestImplementation 'androidx.test.ext:junit:1.1.3'
  androidTestImplementation 'androidx.test.espresso:espresso-core:3.4.0'
}
2. app > src > main > AndroidManifest.xml
<?xml version="1.0" encoding="utf-8"?>
```

```
<manifest xmlns:android="http://schemas.android.com/apk/res/android"</pre>
  xmlns:tools="http://schemas.android.com/tools"
  package="com.example.groceryapplication">
  <application
    android:allowBackup="true"
    android:dataExtractionRules="@xml/data_extraction_rules"
    android:fullBackupContent="@xml/backup_rules"
    android:icon="@drawable/vegetables"
    android:label="@string/app_name"
    android:roundlcon="@drawable/vegetables"
    android:supportsRtl="true"
    android:theme="@style/Theme.GroceryApplication"
    tools:targetApi="31">
    <activity
      android:name=".MainActivity"
      android:exported="true">
      <intent-filter>
        <action android:name="android.intent.action.MAIN" />
        <category android:name="android.intent.category.LAUNCHER" />
      </intent-filter>
    </activity>
  </application>
</manifest>
   3. app > src > main > java >com > example > groceryapplication > GroceryDao.kt
package com.example.groceryapplication
import androidx.lifecycle.LiveData
import androidx.room.*
@Dao
interface GroceryDao {
```

```
@Insert(onConflict = OnConflictStrategy.REPLACE)
  suspend fun insert(item: GroceryItems)
  @Delete
  suspend fun delete(item: GroceryItems)
  @Query("SELECT * FROM grocery_items")
 fun getAllGroceryItems(): LiveData<List<GroceryItems>>
}
   4. app > src > main > java >com > example > groceryapplication >
      GroceryDatabase.kt
package com.example.groceryapplication
import android.content.Context
import androidx.room.Database
import androidx.room.Room
import androidx.room.RoomDatabase
@Database(entities = [GroceryItems::class], version = 1)
abstract class GroceryDatabase: RoomDatabase() {
  abstract fun getGroceryDao(): GroceryDao
  companion object {
    @Volatile
    private var instance: GroceryDatabase? = null
    private val LOCK = Any()
    operator fun invoke(context: Context) = instance ?: synchronized(LOCK) {
      instance ?: createDatabase(context).also {
        instance = it
      }
    }
```

```
private fun createDatabase(context: Context) =
      Room.databaseBuilder(
        context.applicationContext,
        GroceryDatabase::class.java,
        "Grocery.db"
      ).build()
 }
   5. app > src > main > java >com > example > groceryapplication > GroceryItems.kt
package com.example.groceryapplication
import androidx.room.ColumnInfo
import androidx.room.Entity
import androidx.room.PrimaryKey
@Entity(tableName = "grocery_items")
data class GroceryItems(
  @ColumnInfo(name = "itemName")
  var itemName: String,
  @ColumnInfo(name = "itemQuantity")
  var itemQuantity: Int,
  @ColumnInfo(name = "itemPrice")
  var itemPrice: Int,
  ) {
  @PrimaryKey(autoGenerate = true)
  var id: Int? = null
}
   6. app > src > main > java >com > example > groceryapplication >
      GroceryRepository.kt
```

package com.example.groceryapplication

```
class GroceryRepository(private val db: GroceryDatabase) {
  suspend fun insert(items: GroceryItems) = db.getGroceryDao().insert(items)
  suspend fun delete(items: GroceryItems) = db.getGroceryDao().delete(items)
  fun getAllItems() = db.getGroceryDao().getAllGroceryItems()
}
   7. app > src > main > java >com > example > groceryapplication >
      GroceryRVAdapter.kt
package com.example.groceryapplication
import android.annotation.SuppressLint
import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import android.widget.ImageView
import android.widget.TextView
import androidx.recyclerview.widget.RecyclerView
class
          GroceryRVAdapter(var
                                    list:
                                             List<GroceryItems>,
                                                                     private
                                                                                 val
groceryltemClickInterface:
                                                         GroceryItemClickInterface):
RecyclerView.Adapter<GroceryRVAdapter.GroceryViewHolder>() {
                    inner
                             class
                                       GroceryViewHolder(itemView:
                                                                         View)
RecyclerView.ViewHolder(itemView){
    val nameTV: TextView = itemView.findViewById(R.id.idTVItemName)
    val quantityTV: TextView = itemView.findViewById(R.id.idTVQuantity)
    val rateTV: TextView = itemView.findViewById(R.id.idTVRate)
    val amountTV: TextView = itemView.findViewById(R.id.idTVTotalAmt)
    val deleteTV: ImageView = itemView.findViewById(R.id.idTVDelete)
  }
  interface GroceryItemClickInterface{
    fun onltemClick(groceryItems: GroceryItems)
  }
```

```
override fun onCreateViewHolder(parent: ViewGroup, viewType:
                                                                                  Int):
GroceryViewHolder {
        val view = LayoutInflater.from(parent.context).inflate(R.layout.grocery_rv_item,
parent, false)
    return GroceryViewHolder(view)
  }
  @SuppressLint("SetTextI18n")
  override fun onBindViewHolder(holder: GroceryViewHolder, position: Int) {
    holder.nameTV.text = list[position].itemName
    holder.quantityTV.text = list[position].itemQuantity.toString()
    holder.rateTV.text = "Rs. "+ list[position].itemPrice.toString()
    val itemTotal: Int = list[position].itemPrice * list[position].itemQuantity
    holder.amountTV.text = "Rs. SitemTotal"
    holder.deleteTV.setOnClickListener{
      groceryItemClickInterface.onItemClick(list[position])
    }
  }
  override fun getltemCount(): Int {
    return list.size
 }
}
   8. app > src > main > java >com > example > groceryapplication >
      GroceryViewModal.kt
package com.example.groceryapplication
import androidx.lifecycle.ViewModel
import kotlinx.coroutines.GlobalScope
import kotlinx.coroutines.launch
class GroceryViewModal(private val repository: GroceryRepository): ViewModel() {
  fun insert(items: GroceryItems) = GlobalScope.launch {
    repository.insert(items)
```

```
fun delete(items: GroceryItems) = GlobalScope.launch {
      repository.delete(items)
   fun getAllGroceryItems() = repository.getAllItems()
 }
    9. app > src > main > java >com > example > groceryapplication >
       GroceryViewModalFactory.kt
 package com.example.groceryapplication
 import androidx.lifecycle.ViewModel
 import androidx.lifecycle.ViewModelProvider
        GroceryViewModalFactory (private val repository: GroceryRepository) :
 class
 ViewModelProvider.NewInstanceFactory() {
   override fun <T: ViewModel> create(modelClass: Class<T>):T{
     return GroceryViewModal(repository) as T
   }
 }
 10. app > src > main > java >com > example > groceryapplication > MainActivity.kt
package com.example.groceryapplication
import android.annotation.SuppressLint
import android.app.Dialog
import android.os.Bundle
import android.widget.Button
import android.widget.EditText
import android.widget.Toast
import androidx.appcompat.app.AppCompatActivity
import androidx.lifecycle.ViewModelProvider
import androidx.recyclerview.widget.LinearLayoutManager
```

import androidx.recyclerview.widget.RecyclerView import com.google.android.material.floatingactionbutton.FloatingActionButton

```
class MainActivity: AppCompatActivity(), GroceryRVAdapter.GroceryItemClickInterface {
  private lateinit var itemsRV: RecyclerView
  private lateinit var addFAB: FloatingActionButton
  private lateinit var list: List<GroceryItems>
  private lateinit var groceryRVAdapter: GroceryRVAdapter
  private lateinit var groceryViewModal: GroceryViewModal
  @SuppressLint("NotifyDataSetChanged")
  override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)
    setContentView(R.layout.activity_main)
    itemsRV = findViewById(R.id.idRVItems)
    addFAB = findViewById(R.id.idFABAdd)
    list = ArrayList()
    groceryRVAdapter = GroceryRVAdapter(list, this)
    itemsRV.layoutManager = LinearLayoutManager(this)
    itemsRV.adapter = groceryRVAdapter
    val groceryRepository = GroceryRepository(GroceryDatabase(this))
    val factory = GroceryViewModalFactory(groceryRepository)
    groceryViewModal = ViewModelProvider(this, factory)[GroceryViewModal::class.java]
    groceryViewModal.getAllGroceryItems().observe(this) {
      groceryRVAdapter.list = it
      groceryRVAdapter.notifyDataSetChanged()
    }
    addFAB.setOnClickListener {
      openDialog()
   }
 }
  @SuppressLint("NotifyDataSetChanged")
  private fun openDialog() {
    val dialog = Dialog(this)
```

```
dialog.setContentView(R.layout.grocery_add_dialog)
    val cancelBtn = dialog.findViewById<Button>(R.id.idBtnCancel)
    val addBtn = dialog.findViewById<Button>(R.id.idBtnAdd)
    val itemEdt = dialog.findViewById<EditText>(R.id.idEdtItemName)
    val itemPriceEdt = dialog.findViewById<EditText>(R.id.idEdtItemPrice)
    val itemQuantityEdt = dialog.findViewById<EditText>(R.id.idEdtItemQuantity)
    cancelBtn.setOnClickListener {
      dialog.dismiss()
    }
    addBtn.setOnClickListener {
      val itemName: String = itemEdt.text.toString()
      val itemPrice: String = itemPriceEdt.text.toString()
      val itemQuantity: String = itemQuantityEdt.text.toString()
      val gty: Int = itemQuantity.toInt()
      val pr: Int = itemPrice.toInt()
                         if (itemName.isNotEmpty() && itemPrice.isNotEmpty() &&
itemQuantity.isNotEmpty()) {
        val items = GroceryItems(itemName, qty, pr)
        groceryViewModal.insert(items)
                                 Toast.makeText(applicationContext, "Item Inserted..",
Toast.LENGTH_SHORT).show()
        groceryRVAdapter.notifyDataSetChanged()
        dialog.dismiss()
      } else {
                     Toast.makeText(applicationContext, "Please Enter all the data..",
Toast.LENGTH_SHORT).show()
      }
    }
    dialog.show()
  }
  @SuppressLint("NotifyDataSetChanged")
  override fun onItemClick(groceryItems: GroceryItems) {
    groceryViewModal.delete(groceryItems)
    groceryRVAdapter.notifyDataSetChanged()
```

```
Toast.makeText(applicationContext, "Item Deleted..", Toast.LENGTH_SHORT).show()
 }
}
11. app > src > main > res > drawable > custom_button_back.xml
<?xml version="1.0" encoding="utf-8"?>
<shape
                                                              android:shape="rectangle"
xmlns:android="http://schemas.android.com/apk/res/android">
<corners android:radius="20dp"/>
  <solid android:color="@color/blue_shade_2"/>
</shape>
12. app > src > main > res > drawable > ic_add.xml
<vector android:height="24dp" android:tint="#000000"</pre>
  android:viewportHeight="24" android:viewportWidth="24"
  android:width="24dp" xmlns:android="http://schemas.android.com/apk/res/android">
    <path android:fillColor="@android:color/white" android:pathData="M19,13h-6v6h-2v-</pre>
6H5v-2h6V5h2v6h6v2z"/>
</vector>
13. app > src > main > res > drawable > ic_delete.xml
<vector android:height="24dp" android:tint="#000000"</pre>
  android:viewportHeight="24" android:viewportWidth="24"
  android:width="24dp" xmlns:android="http://schemas.android.com/apk/res/android">
    <path android:fillColor="@android:color/white" android:pathData="M6,19c0,1.1 0.9,2</pre>
2,2h8c1.1,0 2,-0.9 2,-2V7H6v12zM19,4h-3.5l-1,-1h-5l-1,1H5v2h14V4z"/>
</vector>
14. app > src > main > res > drawable > ic_launcher_background.xml
<?xml version="1.0" encoding="utf-8"?>
<vector xmlns:android="http://schemas.android.com/apk/res/android"</pre>
  android:width="108dp"
```

```
android:height="108dp"
android:viewportWidth="108"
android:viewportHeight="108">
<path
  android:fillColor="#3DDC84"
  android:pathData="M0,0h108v108h-108z" />
<path
  android:fillColor="#00000000"
  android:pathData="M9,0L9,108"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M19,0L19,108"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M29,0L29,108"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M39,0L39,108"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M49,0L49,108"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M59,0L59,108"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
```

```
android:fillColor="#00000000"
  android:pathData="M69,0L69,108"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M79,0L79,108"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M89,0L89,108"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M99,0L99,108"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M0,9L108,9"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M0,19L108,19"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M0,29L108,29"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M0,39L108,39"
```

```
android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M0,49L108,49"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M0,59L108,59"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M0,69L108,69"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M0,79L108,79"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M0,89L108,89"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M0,99L108,99"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M19,29L89,29"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
```

```
<path
  android:fillColor="#00000000"
  android:pathData="M19,39L89,39"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M19,49L89,49"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M19,59L89,59"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M19,69L89,69"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M19,79L89,79"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M29,19L29,89"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
  android:pathData="M39,19L39,89"
  android:strokeWidth="0.8"
  android:strokeColor="#33FFFFFF" />
<path
  android:fillColor="#00000000"
```

```
android:pathData="M49,19L49,89"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
  <path
    android:fillColor="#00000000"
    android:pathData="M59,19L59,89"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
  <path
    android:fillColor="#00000000"
    android:pathData="M69,19L69,89"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
  <path
    android:fillColor="#00000000"
    android:pathData="M79,19L79,89"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
</vector>
```

15. app > src > main > res > layout> activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/blue_shade_1"
    tools:context=".MainActivity">

    <androidx.recyclerview.widget.RecyclerView
        android:id="@+id/idRVItems"
        android:layout_width="match_parent"
        android:layout_height="match_parent"</pre>
```

```
tools:listitem="@layout/grocery_rv_item" />
  <com.google.android.material.floatingactionbutton.FloatingActionButton</p>
    android:id="@+id/idFABAdd"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_margin="20dp"
    android:backgroundTint="@color/blue_shade_2"
    android:src="@drawable/ic_add"
    app:tint="@color/white" />
</RelativeLayout>
16. app > src > main > res > layout> grocery_add_dialog.xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.cardview.widget.CardView
xmlns:android="http://schemas.android.com/apk/res/android"
  xmlns:app="http://schemas.android.com/apk/res-auto"
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:layout_gravity="center">
  <RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:background="@color/blue_shade_1">
    <TextView
      android:id="@+id/idTVHeading"
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:layout_margin="4dp"
      android:gravity="center"
      android:padding="4dp"
      android:text="@string/add_item_to_cart"
```

```
android:textAlignment="center"
  android:textAllCaps="false"
  android:textColor="@color/white"
  android:textSize="20sp"
  android:textStyle="bold" />
<LinearLayout
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:layout_below="@id/idTVHeading"
  android:orientation="vertical">
  <com.google.android.material.textfield.TextInputLayout</p>
    style="@style/TextInputEditTextTheme"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_margin="5dp"
    android:hint="@string/enter_item_name"
    android:padding="5dp"
    android:textColorHint="@color/white"
    app:hintTextColor="@color/white">
    <com.google.android.material.textfield.TextInputEditText</p>
      android:id="@+id/idEdtItemName"
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:inputType="text"
      android:textColor="@color/white"
      android:textColorHint="@color/white"
      android:textSize="14sp"/>
  </com.google.android.material.textfield.TextInputLayout>
  <com.google.android.material.textfield.TextInputLayout</p>
    style="@style/TextInputEditTextTheme"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
```

```
android:layout_margin="5dp"
  android:hint="@string/enter_item_quantity"
  android:padding="5dp"
  android:textColorHint="@color/white"
  app:hintTextColor="@color/white">
  <com.google.android.material.textfield.TextInputEditText</p>
    android:id="@+id/idEdtItemQuantity"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:inputType="number"
    android:textColor="@color/white"
    android:textColorHint="@color/white"
    android:textSize="14sp"/>
</com.google.android.material.textfield.TextInputLayout>
<com.google.android.material.textfield.TextInputLayout</p>
  style="@style/TextInputEditTextTheme"
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:layout_margin="5dp"
  android:hint="@string/enter_item_price"
  android:padding="5dp"
  android:textColorHint="@color/white"
  app:hintTextColor="@color/white">
  <\!com.google.and roid.material.text field. Text Input Edit Text
    android:id="@+id/idEdtItemPrice"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:inputType="number"
    android:textColor="@color/white"
    android:textColorHint="@color/white"
    android:textSize="14sp"/>
```

</com.google.android.material.textfield.TextInputLayout>

```
<LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="5dp"
        android:orientation="horizontal"
        android:weightSum="2">
        <Button
          android:id="@+id/idBtnCancel"
          android:layout_width="0dp"
          android:layout_height="wrap_content"
          android:layout_margin="8dp"
          android:layout_weight="1"
          android:background="@drawable/custom_button_back"
          android:text="@string/cancel"
          android:textAllCaps="false"
          style="?android:attr/buttonBarButtonStyle" />
        <Button
          android:id="@+id/idBtnAdd"
          android:layout_width="0dp"
          android:layout_height="wrap_content"
          android:layout_margin="8dp"
          android:layout_weight="1"
          android:background="@drawable/custom_button_back"
          android:text="@string/add"
          android:textAllCaps="false"
          style="?android:attr/buttonBarButtonStyle" />
      </LinearLayout>
    </LinearLayout>
  </RelativeLayout>
</androidx.cardview.widget.CardView>
17. app > src > main > res > layout> grocery_rv_item.xml
```

```
<?xml version="1.0" encoding="utf-8"?>
```

```
<androidx.cardview.widget.CardView
xmlns:android="http://schemas.android.com/apk/res/android"
  xmlns:app="http://schemas.android.com/apk/res-auto"
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:layout_margin="8dp"
  android:backgroundTint="@color/blue_shade_2"
  app:cardCornerRadius="5dp"
  app:cardElevation="4dp">
  <RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content">
    <LinearLayout
      android:id="@+id/idLL1"
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:orientation="horizontal"
      android:weightSum="5">
      <TextView
        android:id="@+id/idTVItemName"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_margin="3dp"
        android:layout_weight="2"
        android:padding="4dp"
        android:text="@string/item_name"
        android:textColor="@color/white" />
      <TextView
        android:id="@+id/idTVQuantity"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_margin="3dp"
        android:layout_weight="1"
```

```
android:padding="4dp"
    android:text="@string/quantity"
    android:textColor="@color/white" />
  <TextView
    android:id="@+id/idTVRate"
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_margin="3dp"
    android:layout_weight="1.5"
    android:padding="4dp"
    android:text="@string/rate"
    android:textColor="@color/white" />
  <ImageView
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="0.5"
    android:layout_margin="3dp"
    android:padding="4dp"
    app:tint="@color/white"
    android:src="@drawable/ic_delete"
    android:id="@+id/idTVDelete"
   />
</LinearLayout>
<TextView
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:id="@+id/idTVHeading"
  android:layout_below="@+id/idLL1"
  android:layout_margin="3dp"
  android:layout_toStartOf="@+id/idTVTotalAmt"
  android:padding="4dp"
  android:text="@string/total_cost"
  android:textColor="@color/white"/>
```

```
<TextView
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:id="@+id/idTVTotalAmt"
      android:layout_below="@+id/idLL1"
      android:layout_alignParentEnd="true"
      android:layout_margin="3dp"
      android:padding="4dp"
      android:text="@string/amt"
      android:textColor="@color/white"/>
  </RelativeLayout>
</androidx.cardview.widget.CardView>
18. app > src > main > res > values> colors.xml
<?xml version="1.0" encoding="utf-8"?>
<resources xmlns:tools="http://schemas.android.com/tools">
  <color name="purple_200">#FFBB86FC</color>
  <color name="purple_500">#FF6200EE</color>
  <color name="purple_700">#FF3700B3</color>
  <color name="teal 200">#FF03DAC5</color>
  <color name="teal 700">#FF018786</color>
  <color name="black">#FF000000</color>
  <color name="white">#FFFFFFF</color>
          <color name="mtrl_textinput_default_box_stroke_color" tools:overrise =</pre>
"true">#296098</color>
  <color name="blue shade 1">#0e2433</color>
  <color name="blue_shade_2">#1C4966</color>
</resources>
```

19. app > src > main > res > values> strings.xml

```
<resources>
  <string name="app_name">Grocery Application</string>
  <string name="add_item_to_cart">Add Item to Cart</string>
```

```
<string name="enter_item_name">Enter Item name</string>
  <string name="enter_item_quantity">Enter Item Quantity</string>
  <string name="enter_item_price">Enter Item price</string>
  <string name="cancel">Cancel</string>
  <string name="add">Add</string>
  <string name="item_name">Item Name</string>
  <string name="quantity">Quantity</string>
  <string name="rate">Rate</string>
  <string name="total_cost">Total Cost</string>
  <string name="amt">Amt</string>
</resources>
20. app > src > main > res > values> themes.xml
<resources xmlns:tools="http://schemas.android.com/tools">
  <!-- Base application theme. -->
                                    <style
                                                  name="Theme.GroceryApplication"
parent="Theme.MaterialComponents.DayNight.DarkActionBar">
    <!-- Primary brand color. -->
    <item name="colorPrimary">@color/purple_500</item>
    <item name="colorPrimaryVariant">@color/purple_700</item>
    <item name="colorOnPrimary">@color/white</item>
    <!-- Secondary brand color. -->
    <item name="colorSecondary">@color/teal_200</item>
    <item name="colorSecondaryVariant">@color/teal_700</item>
    <item name="colorOnSecondary">@color/black</item>
    <!-- Status bar color. -->
                                                      name="android:statusBarColor"
                                           <item
tools:targetApi="I">?attr/colorPrimaryVariant</item>
    <!-- Customize your theme here. -->
  </style>
                                     <style
                                                    name="TextInputEditTextTheme"
parent="Widget.MaterialComponents.TextInputLayout.OutlinedBox.Dense">
    <item name="boxStrokeColor">#296098</item>
    <item name="boxStrokeWidth">1dp</item>
  </style>
```

</resources>