Assessment Cover Sheet

ASSESSMENT DETAILS

Student signature/s

Alex

(1)

(2)

(3)

This Assessment Cover Sheet is only to be attached to hard copy submission of assessments.



Unit title		Software Development of Mobile Devices	Tutorial /Lab Group	1	Office use only	
Unit code		COS30017	Due date	2 Nov 2022		
Name of lecturer/tutor		Marlene Lu				
Assignment title		Assignment 3			Faculty or school date stamp	
STUDENT(S) DETAILS						
Student Name(s)					Student ID Number(s)	
(1)	Alex Ngie Guan Ming			102765770		
(2)						
(3)						
(4)						
(5)						
DECLARATION AND STATEMENT OF AUTHORSHIP						
1. I/we have not impersonated, or allowed myself/ourselves to be impersonated by any person for the purposes of this						
2.	assessment. 2. This assessment is my/our original work and no part of it has been copied from any other source except where due					
3.	acknowledgement is made.3. No part of this assessment has been written for me/us by any other person except where such collaboration has been authorised by the lecturer/tutor concerned.					
4.	4. I/we have not previously submitted this work for this or any other course/unit.					
5.	I/we give permission for my/our assessment response to be reproduced, communicated, compared and archived for plagiarism detection, benchmarking or educational purposes.					
I/we understand that:						
6. Plagiarism is the presentation of the work, idea or creation of another person as though it is your own. It is a form of cheating and is a very serious academic offence that may lead to exclusion from the University. Plagiarised material can be drawn from, and presented in, written, graphic and visual form, including electronic data and oral presentations. Plagiarism occurs when the origin of the material used is not appropriately cited.						

Further information relating to the penalties for plagiarism, which range from a formal caution to expulsion from the University is contained on the Current Students website at https://www.swinburne.edu.my/current-students/manage-course/exams-results-assessment

I/we declare that I/we have read and understood the declaration and statement of authorship.

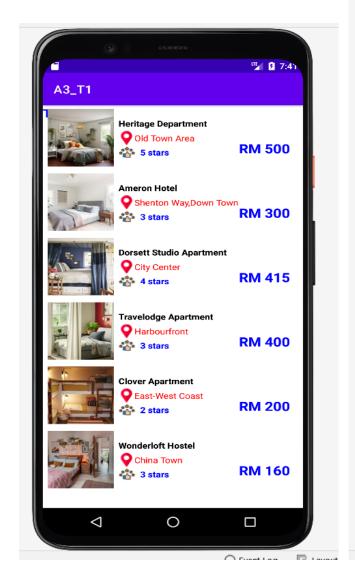
Copies of this form can be downloaded from the Student Forms web page at https://www.swinburne.edu.my/current-students/manage-course/exams-results-assessment/how-to-submit-work.php

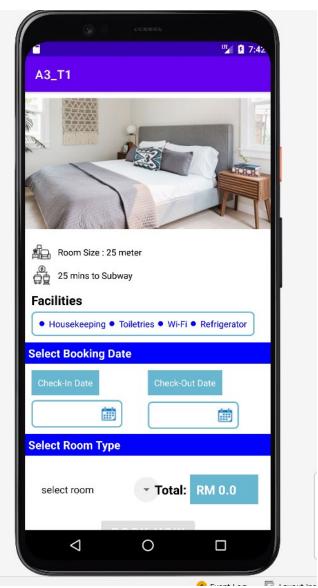
(4)

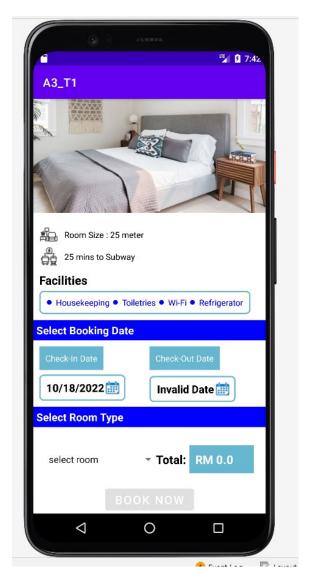
(5)

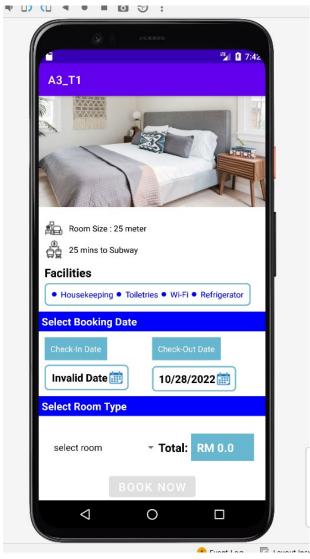
(6)

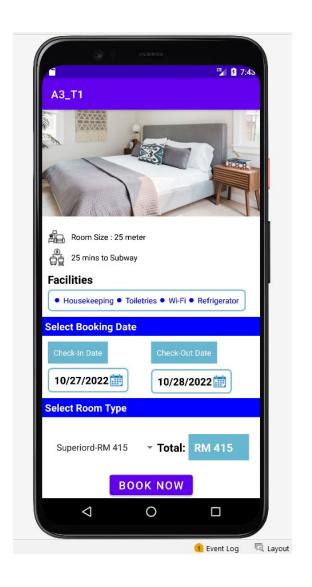
Output Task 1

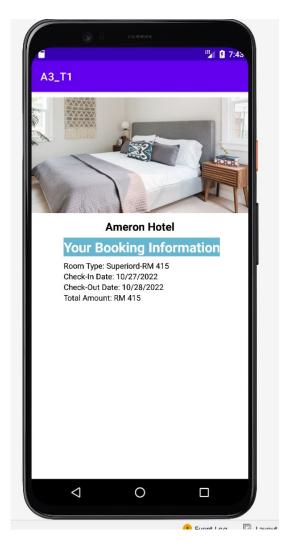












Source Code Task 1

MainActivity.kt

```
package com.example.a3 t1
import android.content.Context
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.view.View
import android.widget.TextView
import android.widget.Toast
import androidx.recyclerview.widget.LinearLayoutManager
import androidx.recyclerview.widget.RecyclerView
import org.w3c.dom.Text
class MainActivity : AppCompatActivity() {
   var room = Room()
   lateinit var contacts:ArrayList<Contact>
    override fun onCreate(savedInstanceState: Bundle?) {
       super.onCreate(savedInstanceState)
       setContentView(R.layout.activity main)
       createHostelRV(this)
    }
    fun createHostelRV(me:Context) {
       val rvContact = findViewById<View>(R.id.rv hostel) as RecyclerView
        contacts = Contact.createContactList(room)
       val adapter = ContactsAdapter(contacts)
       rvContact.adapter = adapter
        rvContact.layoutManager =
LinearLayoutManager(me, RecyclerView.VERTICAL, false)
}
```

Room.kt

```
package com.example.a3 t1
class Room {
    val name = listOf("Heritage Department", "Ameron Hotel", "Dorsett Studio
Apartment", "Travelodge Apartment", "Clover Apartment", "Wonderloft Hostel")
    val heritageApartment = listOf(name.get(0),"Old Town Area","5","28
meter","10 mins to city center","Executive-RM 1200,Deluxe-RM 700," +
            "Superior-RM 500", "Housekeeping, Toiletries, Wi-Fi, Mini
Bar", R.drawable.room1_icon, R.drawable.room1);
    val AmeronHotel = listOf(name.get(1), "Shenton Way, Down Town", "3", "25
meter","25 mins to Subway", "Deluxe-RM 500, Superiord-RM 415, Single-RM 300",
        "Housekeeping, Toiletries, Wi-
Fi, Refrigerator", R.drawable.room2 icon, R.drawable.room2)
    val DorsertStudioApart = listOf(name.get(2), "City Center", "4", "28
meter", "5 mins to Bus Station", "Premier-RM 900, Deluxe-RM 600, Superior-RM
415",
    "Kitchenette, Toiletries, Wi-
FI, Refrigerator", R.drawable. room3 icon, R.drawable. room3)
    val TravelodgeApart = listOf(name.get(3), "Harbourfront", "3", "20
meter", "1.5km to City Center", "Family Room-RM 600, Deluxe- RM
400", "Breakfast, Toiletries, Wi-Fi, Refrigerator",
    R.drawable.room4 icon, R.drawable.room4)
    val CloverApart = listOf(name.get(4), "East-West Coast", "2", "19
meter","10 km to City Center", "Deluxe-RM 450, Superior-RM 370, Single-RM
200", "Toiletries, Wi-Fi, Drinking Water",
    R.drawable.room5 icon, R.drawable.room5)
    val WonderloftHostel = listOf(name.get(5), "China Town", "3", "30
meter","220 meter to public transportation", "Premium Room-RM 350, Dormitory
Room-RM 160",
    "Wi-Fi, Shower, Laundry", R. drawable. room6 icon, R. drawable. room6)
    fun infoApartOrHotel(name:String): List<Any> {
        if (name == AmeronHotel.get(0)) {
            return AmeronHotel
        }else if(name == DorsertStudioApart.get(0)) {
            return DorsertStudioApart
        }else if(name == TravelodgeApart.get(0)){
            return TravelodgeApart
        }else if(name == CloverApart.get(0)) {
            return CloverApart
        }else if(name == heritageApartment.get(0)){
            return heritageApartment
        return WonderloftHostel
    }
    fun HostelNameList():List<Any>{
        return name
}
```

ContactAdapter.kt

```
package com.example.a3 t1
import android.content.Intent
import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import android.widget.ImageView
import android.widget.TextView
import androidx.annotation.Nullable
import androidx.core.content.ContextCompat.startActivity
import androidx.recyclerview.widget.RecyclerView
import org.w3c.dom.Text
class ContactsAdapter (private val
mContacts:List<Contact>):RecyclerView.Adapter<ContactsAdapter.ViewHolder>()
    inner class ViewHolder(itemview:
View) : RecyclerView. ViewHolder(itemview) {
        val txt rate:TextView = itemview.findViewById(R.id.txt rate)
        val txt name:TextView = itemview.findViewById(R.id.txt name)
        val txt area:TextView = itemview.findViewById(R.id.txt area)
        val txt price:TextView = itemview.findViewById(R.id.txt price)
       val img icon:ImageView = itemview.findViewById(R.id.img icon)
    }
    override fun onCreateViewHolder(parent: ViewGroup, viewType: Int):
ViewHolder {
        val context = parent.context
        val inflater = LayoutInflater.from(context)
       val contactView =
inflater.inflate(R.layout.room per row,parent,false)
       return ViewHolder(contactView)
    override fun onBindViewHolder (holder: ContactsAdapter.ViewHolder,
position: Int) {
        val contact:Contact = mContacts.get(position)
        holder.txt name.setText(contact.name)
        holder.txt area.setText(contact.area)
        holder.txt price.setText(contact.price)
        holder.txt rate.setText(contact.rate + " stars")
        holder.img icon.setImageResource(contact.img)
        holder.img icon.setOnClickListener {
            val intent:Intent =
Intent(holder.itemView.context, BookingForm::class.java)
            intent.putExtra("hostelName",contact.name)
            holder.itemView.context.startActivity(intent)
        }
    }
    override fun getItemCount(): Int {
       return mContacts.size
}
```

Contact.kt

```
package com.example.a3 t1
class Contact(val name:String,val rate:String,val price:String,val
area:String,val img:Int) {
   companion object{
        fun createContactList(room:Room):ArrayList<Contact>{
            val contacts = ArrayList<Contact>()
            for(i in 0..room.HostelNameList().size-1){
                val temp =
room.infoApartOrHotel(room.HostelNameList().get(i).toString())
                val temp price with name =
temp.get(5).toString().split(",").toTypedArray()
                val temp price only =
temp price with name.get(temp price with name.size - 1).toString().split("-
").toTypedArray()
                contacts.add(Contact(
                    temp.get(0).toString(),
                    temp.get(2).toString(),
                    temp_price_only.get(temp_price_only.size-1).toString(),
                    temp.get(1).toString(),
                    temp.get(7).toString().toInt()
                ))
            return contacts
       }
   }
}
```

Booking.kt

```
package com.example.a3 t1
class Booking(val listOfRoomInfo:List<Any>) {
    var RoomType:String = "";
    var apartmentName:String = "";
    var CheckInDate:String = "";
    var CheckOutDate:String = "";
    var total:Int = 0;
    fun apartmentName():String{
       return apartmentName;
    fun RoomType():String{
       return RoomType
    }
    fun CheckInDate():String{
      return CheckInDate
    }
    fun CheckOutDate():String{
       return CheckOutDate
    }
    fun total():String{
       return total.toString()
    fun insertApartmentName(temp:String){
       apartmentName = temp
    }
    fun insertRoomType(temp:String){
        RoomType = temp
    fun insertCheckInDate(temp:String) {
        CheckInDate = temp
    }
    fun insertCheckOutDate(temp:String) {
        CheckOutDate = temp
    }
    fun insertTotal(temp:Int){
        total = temp
    }
    fun roomPriceInfo():MutableList<String?>{
        var temp = listOfRoomInfo.get(5).toString()
        var temp 2 = temp.split(",").toTypedArray()
        var temp list:MutableList<String?> = ArrayList()
        temp list.add(0, "select room");
        for (\overline{i} \text{ in } 0 ... \text{ temp } 2.\text{size } -1) {
            temp list.add(i+1, temp 2.get(i).toString());
        return temp list
```

```
fun facilitiesInfo():List<Any>{
        var temp = listOfRoomInfo.get(6).toString()
        var temp_2 = temp.split(",").toTypedArray()
var temp_list:List<Any> = listOfNotNull()
        for(i in 0..temp_2.size -1){
            temp list += temp 2.get(i)
        return temp list
    fun generateRoomPrice(priceWithName:String):Int{
        val temp = priceWithName.split("-").toTypedArray()
        val temp 1 = temp.get(1).split(" ").toTypedArray()
        val price:Int = temp_1.get(1).toInt()
        return price
    }
    fun roomImage():Int{
       return listOfRoomInfo.get(8).toString().toInt()
    fun distanceInfo():String{
       return listOfRoomInfo.get(4).toString()
    fun roomSize():String{
       return "Room Size : " + listOfRoomInfo.get(3).toString()
}
```

BookingForm.kt

```
package com.example.a3 t1
import android.app.DatePickerDialog
import android.graphics.Typeface
import android.os.Bundle
import android.view.View
import android.view.ViewGroup.LayoutParams.WRAP CONTENT
import android.widget.*
import androidx.appcompat.app.AppCompatActivity
import androidx.core.view.marginLeft
import androidx.core.view.setMargins
import java.text.SimpleDateFormat
import java.util.*
class BookingForm : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity booking form)
       val hostelName = intent.getStringExtra("hostelName")
       val room = Room()
       val booking = Booking(room.infoApartOrHotel(hostelName.toString()))
       val txt checkInDate:TextView = findViewById(R.id.txt checkIn)
       val txt checkOutDate:TextView = findViewById(R.id.txt checkOut)
       val txt in:TextView = findViewById(R.id.txt ShowCheckInDate)
       val txt out:TextView = findViewById(R.id.txt ShowCheckOutDate)
       val txt ttl:TextView = findViewById(R.id.txt totalPrice)
       val cal = Calendar.getInstance()
       val spn price:Spinner = findViewById(R.id.spn RoomPrice)
       val btn book:Button = findViewById(R.id.btn book)
        btn book!!.setOnClickListener(object : View.OnClickListener {
            override fun onClick(view: View) {
                booking.insertApartmentName(hostelName.toString())
                booking.insertCheckInDate(txt in.text.toString())
                booking.insertCheckOutDate(txt out.text.toString())
                booking.insertRoomType(spn price.selectedItem.toString())
                val temp = txt ttl.text.toString().split("
").toTypedArray()
                booking.insertTotal(temp.get(1).toString().toInt())
                ShowBookingInformation(booking)
            }
        })
        spn price.onItemSelectedListener = object :
AdapterView.OnItemSelectedListener {
            override fun onItemSelected(parent: AdapterView<*>?, view:
View?, position: Int, id: Long) {
UpdatePrice(txt in,txt out,booking,spn price.selectedItem.toString())
            override fun onNothingSelected(p0: AdapterView<*>?) {
        }
        txt checkInDate!!.setOnClickListener(object : View.OnClickListener
```

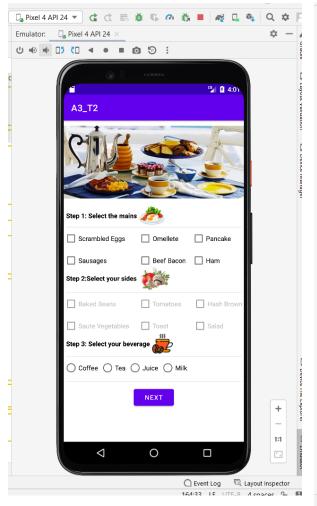
```
override fun onClick(view: View) {
                DatePickerDialog(this@BookingForm,
                    dateListener(cal,"In"),
                    // set DatePickerDialog to point to today's date when
it loads up
                    cal.get(Calendar.YEAR),
                    cal.get(Calendar.MONTH),
                    cal.get(Calendar.DAY OF MONTH)).show()
                    spn price.setSelection(0)
                    txt ttl.setText("RM 0.0")
                    btn book.isEnabled = false
            }
        })
        txt checkOutDate!!.setOnClickListener(object : View.OnClickListener
{
            override fun onClick(view: View) {
                DatePickerDialog(this@BookingForm,
                    dateListener(cal, "Out"),
                    // set DatePickerDialog to point to today's date when
it loads up
                    cal.get(Calendar.YEAR),
                    cal.get(Calendar.MONTH),
                    cal.get(Calendar.DAY OF MONTH)).show()
                    spn price.setSelection(0)
                    txt ttl.setText("RM 0.0")
                    btn book.isEnabled = false
            }
        })
        FacilitiesShow(booking)
        RoomPrice (booking)
        roomImageSizeDistance(booking)
    }
    fun ShowBookingInformation(booking:Booking) {
        val bookinfo:LinearLayout = findViewById(R.id.11 content)
        bookinfo.removeAllViews()
        val params: LinearLayout.LayoutParams =
LinearLayout.LayoutParams (LinearLayout.LayoutParams. WRAP CONTENT,
LinearLayout.LayoutParams.WRAP CONTENT)
        params.setMargins (160, 20, 0, 20)
        val txt = TextView(this)
        txt.setText(booking.apartmentName)
        txt.setTypeface(Typeface.defaultFromStyle(Typeface.BOLD))
        txt.setTextSize(20f)
        txt.textAlignment = View.TEXT ALIGNMENT CENTER
        txt.setTextColor(resources.getColor(R.color.black))
        bookinfo.addView(txt)
        bookinfo.marginLeft
        val txt1 = TextView(this)
        txt1.setText("Your Booking Information")
        txt1.setTypeface(Typeface.defaultFromStyle(Typeface.BOLD))
        txt1.setTextSize(25f)
        txt1.setTextColor(resources.getColor(R.color.white))
        txt1.setBackgroundColor(resources.getColor(R.color.lightblue))
        bookinfo.addView(txt1,params)
```

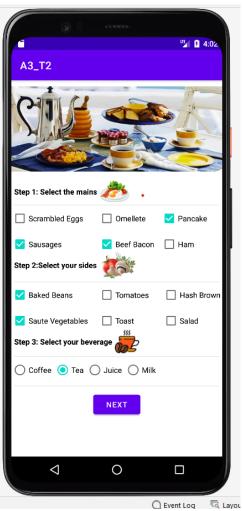
```
val params 1: LinearLayout.LayoutParams =
LinearLayout.LayoutParams(LinearLayout.LayoutParams.WRAP_CONTENT,
LinearLayout.LayoutParams.WRAP CONTENT)
        params 1.setMargins (160,0,0,0)
        val info:List<String> = listOf("Room Type: ","Check-In Date:
", "Check-Out Date: ", "Total Amount: ")
        val info data:List<String> =
listOf(booking.RoomType(),booking.CheckInDate(),booking.CheckOutDate(),"RM
" + booking.total().toString())
        for(i in 0..info.size -1){
            val temp = TextView(this)
            temp.setText(info.get(i) + info data.get(i))
            temp.setTextColor(resources.getColor(R.color.black))
            bookinfo.addView(temp,params 1)
        }
    }
    fun dateListener(cal:Calendar,type:String):
DatePickerDialog.OnDateSetListener {
        val dateSetListener = object : DatePickerDialog.OnDateSetListener {
            override fun onDateSet(view: DatePicker, year: Int,
monthOfYear: Int,
                                   dayOfMonth: Int) {
                cal.set(Calendar.YEAR, year)
                cal.set(Calendar.MONTH, monthOfYear)
                cal.set(Calendar.DAY OF MONTH, dayOfMonth)
                updateDateInView(cal, type)
            }
        }
        return dateSetListener
    fun updateDateInView(cal:Calendar, Type:String) {
        val myFormat = "MM/dd/yyyy" // mention the format you need
        val sdf = SimpleDateFormat(myFormat, Locale.US)
        val selectedDate:String = sdf.format(cal.getTime()).toString()
        val txt in:TextView = findViewById(R.id.txt ShowCheckInDate)
        val txt out:TextView = findViewById(R.id.txt ShowCheckOutDate)
        if(Type == "In"){
            if(checkDate(selectedDate,txt out.text.toString()) == true) {
                txt in.setText(selectedDate)
            }else{
                txt in.setText("Invalid Date")
        }else if(Type == "Out"){
            if(checkDate(txt_in.text.toString(),selectedDate) == true){
                txt out.setText(selectedDate)
            }else {
                txt out.setText("Invalid Date")
        }
    fun checkDate(DateIn:String, DateOut:String):Boolean{
        val myFormat = "MM/dd/yyyy" // mention the format you need
        val sdf = SimpleDateFormat(myFormat, Locale.US)
```

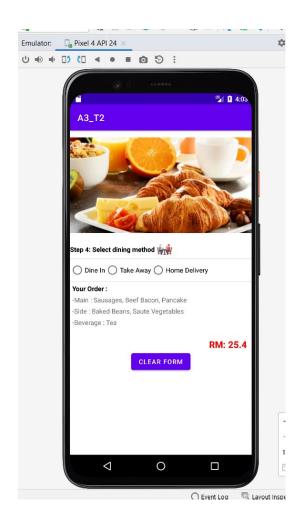
```
var flag:Boolean = false
        if(DateIn.isEmpty() || DateOut.isEmpty() || DateIn == "Invalid
Date" || DateOut == "Invalid Date") {
            flag = true
        }else{
            val dateIn = sdf.parse(DateIn.toString())
            val dateOut = sdf.parse(DateOut.toString())
            val check = dateIn.compareTo(dateOut) // > 0(1 > 2), < 0 (1 <
2) , = 0 (1==2)
            if(check > 0)
                flag = false
            else if( check < 0)</pre>
               flag = true
            else if (check == 0)
               flag = true
       return flag
    }
    fun UpdatePrice(txt in:TextView,txt out:TextView,booking:
Booking, selectedRoom:String) {
        val myFormat = "MM/dd/yyyy" // mention the format you need
        val sdf = SimpleDateFormat(myFormat, Locale.US)
        val btn book:Button = findViewById(R.id.btn book)
        if (txt in.text.isNotEmpty() && txt out.text.isNotEmpty() &&
txt out.text != "Invalid Date" && txt in.text != "Invalid Date" &&
                selectedRoom != "select room") {
            val dateIn = sdf.parse(txt in.text.toString())
            val dateOut = sdf.parse(txt out.text.toString())
            val diff = kotlin.math.abs(dateOut.time - dateIn.time)
            val diffDay = diff / (24*60*60*1000)
            val txt price:TextView = findViewById(R.id.txt totalPrice)
            val x = (diffDay *
booking.generateRoomPrice(selectedRoom)).toString()
            txt price.setText("RM " + x)
            btn book.isEnabled = true
        }else{
           btn book.isEnabled = false
    }
    fun roomImageSizeDistance(booking: Booking) {
        val txt distance:TextView = findViewById(R.id.txt distance)
        val txt roomSize:TextView = findViewById(R.id.txt roomsize)
        val img room:ImageView = findViewById(R.id.img room)
        img room.setImageResource(booking.roomImage())
        txt distance.setText(booking.distanceInfo())
        txt roomSize.setText(booking.roomSize())
    }
    fun RoomPrice(booking:Booking) {
        val spin price:Spinner = findViewById(R.id.spn RoomPrice)
        val x:MutableList<String?> = booking.roomPriceInfo()
        val arrayAdapter:ArrayAdapter<String?> =
ArrayAdapter<String?>(this, android.R.layout.simple list item 1,x)
arrayAdapter.setDropDownViewResource(android.R.layout.simple spinner dropdo
wn item)
        spin price.adapter = arrayAdapter
```

```
}
    fun FacilitiesShow(booking:Booking) {
        val txt_fac_item:LinearLayout =
findViewById(R.id.txt_facilities_item)
       val facilitiesinfo:List<Any> = booking.facilitiesInfo()
        for(i in 0..facilitiesinfo.size-1){
            val txt = TextView(this)
txt.setCompoundDrawablesWithIntrinsicBounds(R.drawable.bullet,0,0,0)
            txt.setCompoundDrawablePadding(20)
            txt.setText(facilitiesinfo.get(i).toString())
            txt.setTextColor(resources.getColor(R.color.blue))
            txt.setPadding(8,0,8,0)
           txt_fac_item.addView(txt)
       }
   }
}
```

Assignment 3 Task 2 Output









Assignment 3 Task 2 Source Code (.kt)

MainActivity.kt

```
package com.example.a3 t2
import android.content.DialogInterface
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.view.View
import android.widget.Button
import android.widget.CheckBox
import android.widget.RadioButton
import android.widget.TextView
import androidx.appcompat.app.AlertDialog
import androidx.fragment.app.Fragment
import androidx.fragment.app.FragmentTransaction
class MainActivity : AppCompatActivity() {
   val first = order1()
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        val ft: FragmentTransaction =
supportFragmentManager.beginTransaction()
       ft.add(R.id.fl,first).addToBackStack("ok").commit()
    }
    fun
PassData (main: String, side: String, Beverage: String, cost: String, fragment:
Fragment) {
        val bundle = Bundle()
        bundle.putString("main", main)
        bundle.putString("side", side)
        bundle.putString("beverage", Beverage)
        bundle.putString("cost", cost)
        SwitchPage(fragment,bundle)
    }
    fun SwitchPage(fragment:Fragment, bundle: Bundle) {
        val ft: FragmentTransaction =
supportFragmentManager.beginTransaction()
        ft.hide(first)
        fragment.arguments = bundle
        ft.add(R.id.fl,fragment).addToBackStack("ok").commit()
    }
}
```

order1.kt

```
package com.example.a3 t2
import android.content.DialogInterface
import android.content.Intent
import android.os.Bundle
import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import android.widget.Button
import android.widget.CheckBox
import android.widget.RadioButton
import android.widget.TextView
import androidx.fragment.app.Fragment
import java.text.DecimalFormat
class order1: Fragment() {
   var totalPrice:Double = 0.00;
   var totalMains:Int = 0;
   var price:Double = 0.00;
   var discount:Double = 0.00;
   var txtPrice : String = ""
   var txtSummary: String = ""
   var txtSide: String = ""
   var txtBeverage: String = ""
    private val main = mutableMapOf<Int, Double>();
    private val sideCost = mutableMapOf<Int, Double>();
    private val beverageCost = mutableMapOf<Int, Double>();
   private val cbBreakfastId:Map<Int,Double> = mapOf(R.id.cb beefbacon to
6.50, R.id.cb eggs to 5.00, R.id.cb omellete to 5.00,
        R.id.cb pancake to 4.00, R.id.cb ham to 6.00, R.id.cb sausage to
6.50):
    private val cbSideId:Map<Int,Double> = mapOf(R.id.cb beans to
2.50, R.id.cb tomato to 1.50, R.id.cb hashbrown to 2.00,
        R.id.cb sauteVege to 3.50, R.id.cb toast to 2.00, R.id.cb salad to
    private val cvSideVegeID:Map<Int,Double> = mapOf(R.id.cb beans to
2.50, R.id.cb hashbrown to 2.00, R.id.cb sauteVege to 3.50,
        R.id.cb salad to 3.00);
    private val rbBeverageId:Map<Int,Double> = mapOf(R.id.rd coffee to
4.00, R.id.rd juice to 5.50, R.id.rd tea to 4.00,
        R.id.rd milk to 5.00);
    private var checkPoint:Boolean = true;
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
    override fun onCreateView(
        inflater: LayoutInflater,
        container: ViewGroup?,
        savedInstanceState: Bundle?
    ): View? {
        var view: View = inflater.inflate(R.layout.order1, container,
false)
        return view
    }
    override fun onViewCreated(view: View, savedInstanceState: Bundle?) {
        super.onViewCreated(view, savedInstanceState)
```

```
//val btnReset: Button = view.findViewById(R.id.btn reset);
        //val btnOrder: Button = view.findViewById(R.id.btn order);
        val btn next:Button = view.findViewById(R.id.btn next)
        btn next.setOnClickListener() {
            (context as
MainActivity).PassData(txtSummary,txtSide,txtBeverage,txtPrice,order2())
        listenOfMainCB(view)
        listenOfSidesCB(view)
        listenOfTeaRB(view)
    fun listenOfTeaRB(view:View) {
        val cof:RadioButton = view.findViewById(R.id.rd coffee)
        val tea:RadioButton = view.findViewById(R.id.rd tea)
        val juice:RadioButton = view.findViewById(R.id.rd juice)
        val milk:RadioButton = view.findViewById(R.id.rd milk)
        cof.setOnClickListener(){
            selectBeverage(view,cof)
        tea.setOnClickListener() {
            selectBeverage(view, tea)
        juice.setOnClickListener() {
            selectBeverage(view, juice)
        milk.setOnClickListener() {
           selectBeverage(view, milk)
        }
    }
    fun listenOfMainCB(view:View) {
        val egg:CheckBox = view.findViewById(R.id.cb eggs)
        val ome:CheckBox = view.findViewById(R.id.cb omellete)
        val pan:CheckBox = view.findViewById(R.id.cb pancake)
        val sau:CheckBox = view.findViewById(R.id.cb sausage)
        val beef:CheckBox = view.findViewById(R.id.cb beefbacon)
        val ham:CheckBox = view.findViewById(R.id.cb ham)
        egg.setOnClickListener() {
            checkedBreakfast(view,egg)
        ome.setOnClickListener(){
            checkedBreakfast(view,ome)
        pan.setOnClickListener() {
            checkedBreakfast(view,pan)
        }
        sau.setOnClickListener() {
            checkedBreakfast(view, sau)
        beef.setOnClickListener() {
            checkedBreakfast(view, beef)
        }
        ham.setOnClickListener() {
            checkedBreakfast(view, ham)
        }
    }
```

```
fun listenOfSidesCB(view: View) {
        val beans:CheckBox = view.findViewById(R.id.cb beans)
        val toma:CheckBox = view.findViewById(R.id.cb tomato)
        val hash:CheckBox = view.findViewById(R.id.cb hashbrown)
        val vege:CheckBox = view.findViewById(R.id.cb sauteVege)
        val toast:CheckBox = view.findViewById(R.id.cb toast)
        val salad:CheckBox = view.findViewById(R.id.cb salad)
        beans.setOnClickListener() {
           checkedSides(view, beans)
        toma.setOnClickListener() {
           checkedSides(view,toma)
        hash.setOnClickListener() {
           checkedSides(view, hash)
        vege.setOnClickListener() {
           checkedSides(view, vege)
        toast.setOnClickListener() {
           checkedSides(view,toast)
        salad.setOnClickListener() {
           checkedSides(view, salad)
        }
    }
    fun
printReceipe(title:String,order:MutableMap<Int,Double>,ori:MutableMap<Int,D</pre>
ouble>, view: View) : String{
       var message:String = title;
        for((key, value) in order) {
           var temp: CheckBox = view.findViewById(key);
           "+ori[key]+"\n";
           discount += (ori[key]!! - order[key]!!);
       return message;
    fun checkedBreakfast(view: View, cb:CheckBox) {
        var temp:String = "-Main : ";
        if(cb is CheckBox){
           val checked:Boolean = cb.isChecked;
            for((key,value) in cbBreakfastId){
                if(cb.id == key) {
                    if (checked) {
                        totalPrice += value;
                        totalMains += 1;
                        main[key] = value;
                    }else{
                        totalPrice -= value;
                        totalMains -= 1;
                        main.remove(key);
                    }
                }
            }
        var n:Int = 0;
```

```
for((key, value ) in main) {
            n++;
            val x: CheckBox = view.findViewById(key);
            temp += x.text;
            if(n < main.size) {</pre>
                temp += ", ";
        if(totalMains > 0 && checkPoint){
            checkPoint = false;
            enableDisableSide(true, view)
        }else if(!checkPoint && totalMains == 0) {
            temp = "";
            checkPoint = true;
            enableDisableSide(false, view);
            sideCost.clear();
        checkDiscountBeverage()
        updatePrice();
        val df = DecimalFormat("#.##")
        txtPrice = df.format(totalPrice).toString();
        txtSummary = temp;
    }
    private fun updatePrice(){
        val df = DecimalFormat("#.##")
        for((key,value) in sideCost){
            var x:Boolean = cvSideVegeID.containsKey(key);
            if(x){ // exist in choosed side list
                if(totalMains >= 3) { // true means main choose equal or
more than 3
                    if(cvSideVegeID[key] == value){ // if both price equal
                        totalPrice -= value;
                        totalPrice += df.format(value*0.8).toDouble();
                        sideCost[key] = df.format(value*0.8).toDouble();
                    }
                }else{
                    if(cvSideVegeID[key] != value) {
                         totalPrice -= value;
                        totalPrice += cvSideVegeID[key]!!;
                        sideCost[key] = cvSideVegeID[key]!!;
                }
            }
        }
    }
    fun checkDiscountBeverage(){
        totalPrice -= price
        val df = DecimalFormat("#.##")
        if(totalPrice >= 20){
            for((key,value) in beverageCost){
                price = df.format(value*0.9).toDouble()
                totalPrice += price
        }else{
            for((key,value) in beverageCost){
                price = value.toDouble()
                totalPrice += price
```

```
}
        }
    }
    fun checkedSides(view: View, cb:CheckBox) {
        val df = DecimalFormat("#.##")
        if(cb is CheckBox){
            val checked:Boolean = cb.isChecked;
            val exist:Boolean = sideCost.containsKey(cb.id);
            if(exist){
                totalPrice -= sideCost[cb.id]!!;
                sideCost.remove(cb.id);
            }else{
                for((ley,value) in cbSideId){
                    if(cb.id == ley) {
                         if (checked) {
                             if(totalMains >= 3 && cb.id != R.id.cb toast &&
cb.id != R.id.cb tomato) {
                                 totalPrice +=
df.format(value*0.8).toDouble();
                                 sideCost[ley] =
df.format(value*0.8).toDouble();
                             }else{
                                 totalPrice += value;
                                 sideCost[ley] = value;
                             }
                        }
                    }
                }
            }
        }
        var temp:String = "-Side : ";
        var n:Int = 0;
        for((key, value) in sideCost){
            var x = view.findViewById<TextView>(key);
            temp += x.text;
            if(n != sideCost.size){
                temp += ", ";
            }
        txtSide = temp;
        txtPrice = totalPrice.toString();
    }
    private fun enableDisableSide(temp:Boolean, view: View) {
        for((key,value) in cbSideId){
            var x: CheckBox = view.findViewById(key);
            if(temp) {
                x.isEnabled = true;
            }else{
                x.isChecked = false;
                x.isEnabled = false;
                totalPrice = price;
        txtSide = "";
    }
    fun selectBeverage(view: View, cb:RadioButton) {
        var x:Int = 0;
```

```
if(cb is RadioButton) {
            var checked:Boolean = cb.isChecked;
            for((key,value) in rbBeverageId) {
                if(cb.id == key) {
                    if (checked) {
                        if(price == 0.0){
                            price = discountBeverage(value);
                        }else{
                            totalPrice -= price;
                            price = discountBeverage(value);
                        x = key;
                        totalPrice += price;
                    }
               }
            }
        val rd: RadioButton = view.findViewById(x);
        txtBeverage = "-Beverage : " + rd.text;
       txtPrice = String.format("%.2f", totalPrice).toDouble().toString()
       beverageCost.clear();
       beverageCost[x] = rbBeverageId[x]!!;
    }
    fun discountBeverage(value:Double):Double{
       var x:Double = value
        val df = DecimalFormat("#.##")
        if(totalPrice >= 20){
           x = x*0.9
       return String.format("%.2f", x).toDouble()
   }
}
```

order2.kt

```
package com.example.a3 t2
import android.os.Bundle
import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import android.widget.RadioButton
import android.widget.TextView
import androidx.fragment.app.Fragment
class order2 : Fragment() {
   var main:String = ""
   var side:String = ""
   var beverage:String = ""
   var cost:String = ""
    var DiningMethodCost:Double = 0.00
    override fun onCreate(savedInstanceState: Bundle?) {
       super.onCreate(savedInstanceState)
    override fun onCreateView(
        inflater: LayoutInflater,
        container: ViewGroup?,
        savedInstanceState: Bundle?
    ): View? {
       var view: View = inflater.inflate(R.layout.order2, container,
false)
       return view
    override fun onViewCreated(view: View, savedInstanceState: Bundle?) {
        super.onViewCreated(view, savedInstanceState)
        main = arguments?.getString("main").toString()
        side = arguments?.getString("side").toString()
       beverage = arguments?.getString("beverage").toString()
       cost = arguments?.getString("cost").toString()
       val txt main:TextView = view.findViewById(R.id.txt summary)
       val txt side:TextView = view.findViewById(R.id.txt side)
       val txt beverage:TextView = view.findViewById(R.id.txt beverage)
       val txt cost:TextView = view.findViewById(R.id.txt cost)
        txt main.setText(main)
       txt side.setText(side)
       txt beverage.setText(beverage)
       txt cost.setText(cost)
       listenOfDiningMethodRB(view)
    }
    fun listenOfDiningMethodRB(view:View) {
        var temp cost:Double = 0.00
        val rb dinein:RadioButton = view.findViewById(R.id.rb dinein)
        val rb takeaway:RadioButton = view.findViewById(R.id.rb takeaway)
        val rb delivery:RadioButton = view.findViewById(R.id.rb delivery)
        rb dinein.setOnClickListener() {
            DeliveryMethodPriceAddMinus(view, 0.00, "Dine In")
        rb takeaway.setOnClickListener() {
            DeliveryMethodPriceAddMinus(view, 1.50, "Take Away")
        rb delivery.setOnClickListener() {
```

```
DeliveryMethodPriceAddMinus(view, 4.00, "Home Delivery")
        }
    }
    fun
DeliveryMethodPriceAddMinus(view:View,price:Double,DineMethod:String){
        var temp cost:Double = cost.toDouble()
        if(DiningMethodCost == 0.00){
            DiningMethodCost = price
        }else{
            temp_cost = cost.toDouble()
            temp_cost -= DiningMethodCost
            DiningMethodCost = price
        temp_cost += price
        cost = temp cost.toString()
        val txt cost:TextView = view.findViewById(R.id.txt cost)
        txt_cost.setText(cost)
        val txt dine:TextView = view.findViewById(R.id.txt dineMethod)
       txt dine.setText("-Dining Method : " + DineMethod)
    }
}
```

Assignment 3 Task 2 Source Code (.xml)

MainActivity.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    </frameLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:layout_height="match_parent">
        </frameLayout>
    </frameLayout>
    </frameLayout.widget.ConstraintLayout>
```

Order1.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</pre>
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">
    <ScrollView
        android:layout width="match parent"
        android:layout height="match parent">
        <androidx.constraintlayout.widget.ConstraintLayout</pre>
            android:layout_width="match parent"
            android:layout height="match parent">
            <ImageView</pre>
                android:id="@+id/img banner"
                android:layout width="wrap content"
                android:layout height="wrap content"
                app:layout_constraintEnd_toEndOf="parent"
                app:layout_constraintStart toStartOf="parent"
                app:layout constraintTop toTopOf="parent"
                app:srcCompat="@drawable/banner2" />
            <TextView
                android:id="@+id/txt step1"
                android:layout width="wrap content"
                android:layout height="wrap content"
                android:layout margin="5dp"
                android:text="Step 1: Select the mains"
                android:textColor="@color/black"
                android:textStyle="bold"
                app:layout constraintBottom toBottomOf="@+id/img breakfast"
                app:layout constraintStart toStartOf="parent"
                app:layout constraintTop toTopOf="@+id/img breakfast" />
            <ImageView</pre>
                android:id="@+id/img breakfast"
                android:layout width="wrap content"
                android:layout height="wrap content"
                android:layout margin="5dp"
                app:layout constraintStart toEndOf="@+id/txt step1"
                app:layout constraintTop toBottomOf="@+id/img banner"
                app:srcCompat="@drawable/breakfast icon" />
            <View
                android:id="@+id/divider 1"
                android:layout width="match parent"
                android:layout height="1dp"
                android:layout margin="5dp"
                android:background="?android:attr/listDivider"
                app:layout constraintTop toBottomOf="@+id/img breakfast" />
            <CheckBox
                android:id="@+id/cb eggs"
                android:layout width="wrap content"
                android:layout height="wrap content"
                android:text="Scrambled Eggs"
                app:layout constraintStart toStartOf="parent"
```

```
app:layout constraintTop toBottomOf="@+id/divider 1" />
<CheckBox
   android:id="@+id/cb omellete"
    android:layout width="wrap content"
    android:layout height="wrap content"
   android:text="Omellete"
   app:layout constraintEnd toStartOf="@+id/cb pancake"
    app:layout_constraintStart toEndOf="@+id/cb eggs"
    app:layout constraintTop toTopOf="@+id/cb eggs" />
<CheckBox
   android:id="@+id/cb pancake"
    android:layout width="wrap content"
    android:layout height="wrap content"
   android:text="Pancake"
   app:layout constraintEnd toEndOf="parent"
    app:layout_constraintStart toEndOf="@+id/cb omellete"
    app:layout constraintTop toTopOf="@+id/cb omellete" />
<CheckBox
   android:id="@+id/cb_sausage"
   android:layout width="wrap content"
   android:layout height="wrap content"
   android:text="Sausages"
   app:layout constraintStart toStartOf="parent"
   app:layout constraintTop toBottomOf="@+id/cb eggs" />
<CheckBox
   android:id="@+id/cb beefbacon"
   android:layout width="wrap content"
   android:layout height="wrap content"
   android:text="Beef Bacon"
    app:layout constraintStart toStartOf="@+id/cb omellete"
   app:layout constraintTop toBottomOf="@+id/cb omellete" />
<CheckBox
   android:id="@+id/cb ham"
   android:layout width="wrap content"
   android:layout height="wrap content"
   android:text="Ham"
    app:layout constraintStart toStartOf="@+id/cb pancake"
   app:layout constraintTop toBottomOf="@+id/cb pancake" />
<TextView
   android:id="@+id/txt step2"
   android:layout width="wrap content"
   android:layout height="wrap content"
   android:layout_margin="5dp"
   android:text="Step 2:Select your sides "
   android:textColor="@color/black"
   android:textStyle="bold"
    app:layout constraintStart toStartOf="parent"
    app:layout constraintTop toBottomOf="@id/cb sausage" />
<ImageView</pre>
    android:id="@+id/img side"
    android:layout width="wrap content"
    android:layout_height="wrap content"
    android:layout margin="5dp"
    app:layout constraintBottom toBottomOf="@id/txt step2"
```

```
app:layout_constraintStart_toEndOf="@id/txt step2"
    app:layout_constraintTop toTopOf="@+id/txt step2"
    app:srcCompat="@drawable/side icon" />
<View
    android:id="@+id/divider2"
    android:layout width="match parent"
    android:layout height="1dp"
   android:layout margin="5dp"
    android:background="?android:attr/listDivider"
    app:layout constraintTop toBottomOf="@+id/img side" />
<CheckBox
    android:id="@+id/cb beans"
    android:layout_width="wrap_content"
   android:layout height="wrap content"
   android:enabled="false"
   android:text="Baked Beans"
   app:layout constraintStart toStartOf="parent"
    app:layout constraintTop toBottomOf="@+id/divider2" />
<CheckBox
   android:id="@+id/cb_tomato"
   android:layout width="wrap content"
   android:layout height="wrap content"
   android:enabled="false"
   android:text="Tomatoes"
   app:layout constraintBottom toBottomOf="@id/cb beans"
   app:layout constraintStart toStartOf="@+id/cb beefbacon"
    app:layout constraintTop toTopOf="@id/cb beans" />
<CheckBox
   android:id="@+id/cb hashbrown"
   android:layout width="wrap content"
   android:layout height="wrap content"
   android:enabled="false"
   android:text="Hash Brown"
   app:layout constraintBottom toBottomOf="@id/cb tomato"
   app:layout constraintEnd toEndOf="parent"
    app:layout constraintStart toStartOf="@id/cb ham"
   app:layout constraintTop toTopOf="@id/cb tomato" />
<CheckBox
   android:id="@+id/cb sauteVege"
   android:layout width="wrap content"
   android:layout height="wrap content"
   android:enabled="false"
   android:text="Saute Vegetables"
    app:layout constraintStart toStartOf="@id/cb beans"
    app:layout constraintTop toBottomOf="@id/cb beans" />
<CheckBox
   android:id="@+id/cb toast"
    android:layout width="wrap content"
   android:layout height="wrap content"
   android:enabled="false"
    android:text="Toast"
    app:layout constraintStart toStartOf="@id/cb tomato"
    app:layout_constraintTop toBottomOf="@id/cb tomato" />
```

```
android:id="@+id/cb salad"
    android:layout width="wrap content"
    android:layout height="wrap content"
   android:enabled="false"
   android:text="Salad"
    app:layout_constraintStart toStartOf="@id/cb hashbrown"
    app:layout constraintTop toBottomOf="@id/cb hashbrown" />
<TextView
   android:id="@+id/txt step3"
    android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:layout margin="5dp"
   android:text="Step 3: Select your beverage"
   android:textColor="@color/black"
    android:textStyle="bold"
   app:layout constraintStart toStartOf="parent"
   app:layout constraintTop toBottomOf="@id/cb sauteVege" />
<ImageView</pre>
   android:id="@+id/img coffee"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
   android:layout margin="5dp"
   app:layout constraintBottom toBottomOf="@id/txt step3"
   app:layout_constraintStart_toEndOf="@id/txt step3"
    app:layout constraintTop toTopOf="@id/txt step3"
   app:srcCompat="@drawable/coffee icon" />
<View
   android:id="@+id/divider3"
    android:layout width="match parent"
   android:layout height="1dp"
   android:layout margin="5dp"
    android:background="?android:attr/listDivider"
    app:layout constraintTop toBottomOf="@id/img coffee" />
< Radio Group
    android:id="@+id/radioGroup1"
    android:layout width="wrap content"
   android:layout height="wrap content"
   android:orientation="horizontal"
    app:layout constraintStart toStartOf="parent"
    app:layout constraintTop toBottomOf="@id/divider3">
    < Radio Button
        android:id="@+id/rd coffee"
        android:layout width="match parent"
        android:layout height="wrap content"
        android:layout_marginRight="5dp"
        android:text="Coffee" />
    < Radio Button
        android:id="@+id/rd tea"
        android:layout width="match parent"
        android:layout height="wrap content"
        android:layout marginRight="5dp"
        android:text="Tea" />
    < Radio Button
```

```
android:id="@+id/rd juice"
                    android:layout width="wrap content"
                    android:layout height="wrap content"
                    android:layout_marginRight="5dp"
                    android:layout_weight="1"
                    android:text="Juice" />
                < Radio Button
                    android:id="@+id/rd milk"
                    android:layout_width="wrap_content"
                    android:layout_height="wrap_content"
                    android:layout weight="1"
                    android:text="Milk" />
            </RadioGroup>
            <View
                android:id="@+id/divider4"
                android:layout_width="match_parent"
                android:layout_height="1dp"
                android:layout margin="5dp"
                android:background="?android:attr/listDivider"
                app:layout constraintStart toStartOf="parent"
                app:layout constraintTop toBottomOf="@id/radioGroup1" />
            <Button
                android:id="@+id/btn next"
                android:layout width="wrap content"
                android:layout_height="wrap_content"
                app:layout_constraintTop_toBottomOf="@+id/divider4"
                android:layout marginTop="10dp"
                app:layout constraintStart toStartOf="parent"
                app:layout constraintEnd toEndOf="parent"
                android:text="NEXT"/>
        </androidx.constraintlayout.widget.ConstraintLayout>
    </ScrollView>
</androidx.constraintlayout.widget.ConstraintLayout>
```

Order2.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</pre>
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="match parent">
    <ImageView</pre>
        android:id="@+id/img main2"
        android:layout_width="wrap content"
        android:layout height="wrap content"
        app:layout constraintTop toTopOf="parent"
        app:layout constraintStart toStartOf="parent"
        app:srcCompat="@drawable/main2" />
    <TextView
       android:id="@+id/txt step4"
        app:layout constraintStart toStartOf="parent"
        app:layout constraintTop toBottomOf="@id/img main2"
       android:layout marginTop="10dp"
       android:textStyle="bold"
       android:textColor="@color/black"
        android:layout width="wrap content"
        android:layout_height="wrap content"
        android:text="Step 4: Select dining method" />
    <ImageView</pre>
        android:id="@+id/img res icon"
        android:layout width="wrap content"
        android:layout height="wrap content"
        app:layout constraintTop toTopOf="@id/txt step4"
        app:layout constraintBottom toBottomOf="@id/txt step4"
        app:layout constraintStart toEndOf="@id/txt step4"
        android:layout marginLeft="5dp"
        app:srcCompat="@drawable/restaurant icon" />
    <View
        android:id="@+id/divider1"
        android:layout width="match parent"
        android:layout height="1dp"
        android:background="?android:attr/listDivider"
        app:layout constraintStart toStartOf="parent"
        android:layout marginTop="10dp"
        android:layout marginBottom="10dp"
        app:layout constraintTop toBottomOf="@id/txt step4" />
    < Radio Group
        android:id="@+id/rg1"
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:orientation="horizontal"
        app:layout constraintStart toStartOf="parent"
        app:layout constraintTop toBottomOf="@id/divider1">
        < Radio Button
            android:id="@+id/rb dinein"
            android:layout width="match parent"
            android:layout height="wrap content"
            android:textColor="@color/black"
```

```
android:text="Dine In" />
    <RadioButton
        android:id="@+id/rb takeaway"
        android:layout_width="match parent"
        android:layout height="wrap content"
        android:textColor="@color/black"
        android:text="Take Away" />
    <RadioButton
        android:id="@+id/rb delivery"
        android:layout width="match parent"
        android:layout height="wrap content"
        android:textColor="@color/black"
        android:text="Home Delivery" />
</RadioGroup>
<View
    android:id="@+id/divider2"
    android:layout width="match parent"
    android:layout height="1dp"
    android:background="?android:attr/listDivider"
    app:layout constraintStart toStartOf="parent"
    android:layout_marginBottom="10dp"
    app:layout constraintTop toBottomOf="@id/rg1" />
<TextView
   android:id="@+id/txt order"
    android:layout width="wrap content"
   android:layout height="wrap content"
   android:layout_margin="5dp"
   android:text="Your Order : "
   android:textColor="@color/black"
   android:layout marginLeft="10dp"
   android:textStyle="bold"
    app:layout constraintStart toStartOf="parent"
    app:layout constraintTop toBottomOf="@id/divider2" />
<TextView
    android:id="@+id/txt summary"
    android:layout width="wrap content"
    android:layout height="wrap content"
   android:layout margin="5dp"
   android:text=""
    app:layout constraintStart toStartOf="parent"
    app:layout constraintTop toBottomOf="@+id/txt order" />
<TextView
    android:id="@+id/txt side"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout margin="5dp"
    app:layout constraintStart toStartOf="parent"
    app:layout constraintTop toBottomOf="@+id/txt summary"
   android:text="" />
<TextView
    android:id="@+id/txt_beverage"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:layout margin="5dp"
```

```
app:layout constraintTop toBottomOf="@id/txt side"
    app:layout constraintStart toStartOf="parent"
    android:text="" />
<TextView
    android:id="@+id/txt dineMethod"
    android:layout_width="wrap content"
    android:layout height="wrap content"
    app:layout constraintTop toBottomOf="@id/txt beverage"
    android:layout margin="5dp"
    app:layout constraintStart toStartOf="parent"
    android:text="" />
<TextView
   android:id="@+id/txt rm"
    android:layout_width="wrap content"
   android:layout height="wrap content"
   android:text="RM: "
   android:textColor="@color/red"
   android:textSize="20dp"
   android:textStyle="bold"
   app:layout constraintBottom toBottomOf="@id/txt cost"
    app:layout_constraintEnd_toStartOf="@id/txt cost"
    app:layout constraintTop toTopOf="@id/txt cost" />
<TextView
   android:id="@+id/txt cost"
   android:layout width="wrap content"
   android:layout_height="wrap content"
   android:layout marginRight="10dp"
   android:text="0.00"
   android:textColor="@color/red"
   android:textSize="20dp"
   android:textStyle="bold"
   app:layout constraintEnd toEndOf="parent"
    app:layout constraintTop toBottomOf="@id/txt dineMethod" />
<Button
   android:id="@+id/button"
    app:layout constraintStart toStartOf="parent"
    app:layout constraintEnd toEndOf="parent"
   app:layout constraintTop toBottomOf="@id/txt cost"
   android:layout width="wrap content"
   android:layout height="wrap content"
    android:text="CLEAR FORM" />
```

</androidx.constraintlayout.widget.ConstraintLayout>