



# Alfaisal University - College of Engineering

## Software Engineering Department

### Homework Cover Page

Follow the guidelines below in submitting your work.

1. Your homework should have this **cover page** duly filled out by you.
2. Where possible and applicable, your solution should be typed and printed.
3. Show your work in an organized manner. Do not crowd your solution pages.
4. Elaborate on any assumptions made or shortcuts (jumps) taken in your solution.
5. Reference your figures, tables, constants, equations and conversions, used to complete the problem.
6. **Submit ONLY ELECTRONICALLY in Moodle, in only one pdf file (Hard copies are NOT accepted).**

*I declare that this submission is my own, and that no part of it has been copied from another source except where properly acknowledged.*

Student's signature: \_\_\_\_\_

Student ID	200226	Student Name	Amaan Ahmed Zubairi
Course Code	SE 328	Course Name	Mobile Application Development
Assignment Number	1	Professor Name	Dr. George Violettas
Date of Submission	Sunday, Feb 13, 2022	Instructor Name	

Problem	P1	Total
Mark		
Maximum	10	10

Evaluator's initials: \_\_\_\_\_

Date: \_\_\_\_\_

Course Learning Outcomes (CLO)		Questions
CLO1	Design and understand software architecture for large-scale software systems using various architectural styles.	1
CLO2	Develop detailed software design using various approaches such as design patterns.	N/A
CLO3	Use sound software metrics to measure and assess the quality of the software.	N/A
CLO4	Express and effectively present a developed software design in a software design document (SDD) for a software project of significant size.	N/A
CLO5	Work effectively as leader/member of a development team to deliver quality software design	N/A

Follow the slides for Chapter 3, and finalize the project. Make sure your application works fine, and the spinner (drop



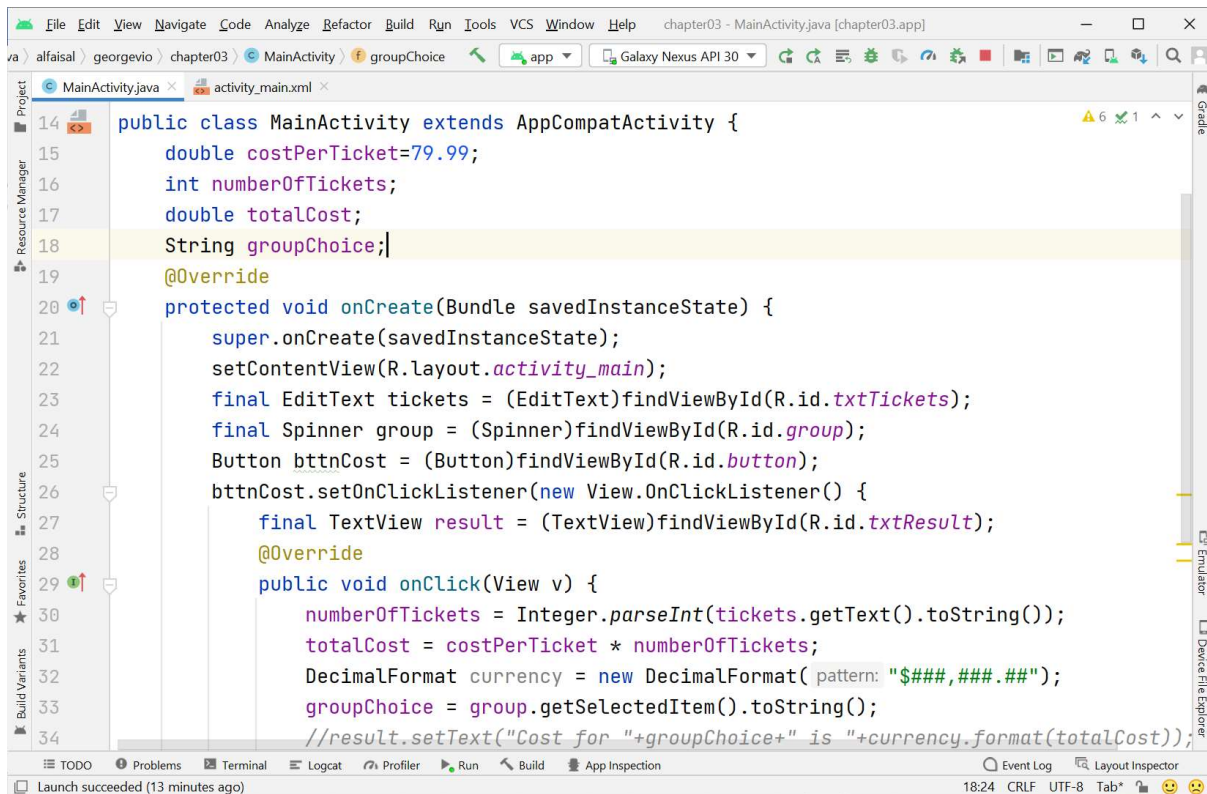
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### Homework Cover Page

down menu) has at least three(3) choices.

Then,



```
14 public class MainActivity extends AppCompatActivity {
15     double costPerTicket=79.99;
16     int numberOfTickets;
17     double totalCost;
18     String groupChoice;
19     @Override
20     protected void onCreate(Bundle savedInstanceState) {
21         super.onCreate(savedInstanceState);
22         setContentView(R.layout.activity_main);
23         final EditText tickets = (EditText)findViewById(R.id.txtTickets);
24         final Spinner group = (Spinner)findViewById(R.id.group);
25         Button btnCost = (Button)findViewById(R.id.button);
26         btnCost.setOnClickListener(new View.OnClickListener() {
27             final TextView result = (TextView)findViewById(R.id.txtResult);
28             @Override
29             public void onClick(View v) {
30                 numberOfTickets = Integer.parseInt(tickets.getText().toString());
31                 totalCost = costPerTicket * numberOfTickets;
32                 DecimalFormat currency = new DecimalFormat( pattern: "$###,###.##");
33                 groupChoice = group.getSelectedItem().toString();
34                 //result.setText("Cost for "+groupChoice+" is "+currency.format(totalCost));
35             }
36         });
37     }
38 }
```

create one or more if statements depending on the value of groupChoice (look at line 33 in the figure above), which will calculate a different final price for the totalCost.

Moreover, you have to create different costPerTicketValue variables with values of your choice.

The idea is that the final price depends on the drop-down choice of the user, and the number of tickets.

**MAKE ASSUMPTIONS and state them clearly.**

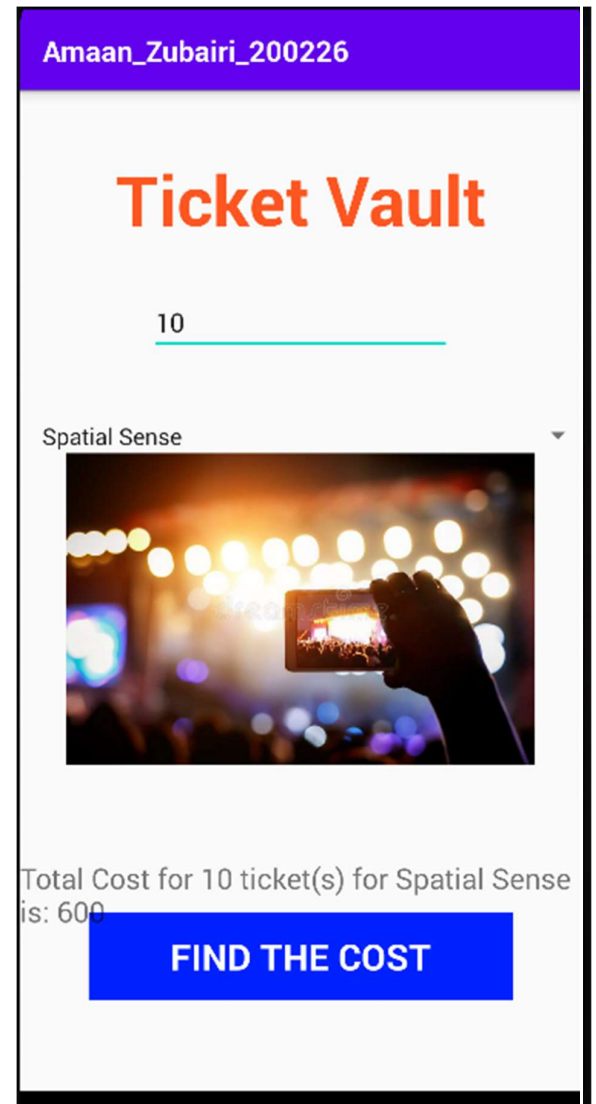
#### DELIVERABLES:

ONLY ONE pdf file with:

1. Screenshots for the code inserted in MainActivity.
2. Screenshots for the final picture of your application where it calculates difference prices for the SAME number of tickets for different values of the drop-down menu. MAKE SURE THAT THE TITLE OF THE APPLICATION is your name and ID.

**Good luck...**

## Screenshots:




Amaan\_Zubairi\_200226

# Ticket Vault

10

Zig Zag



Total Cost for 10 ticket(s) for Zig Zag is:  
800

**FIND THE COST**

```
public class MainActivity extends AppCompatActivity {

    double prices [] = {50,60,80};
    double totalCost;
    int tickets;
    String choice;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        Button costBtn = (Button) findViewById(R.id.priceCalcButton);
        final EditText ticketCount = (EditText) findViewById(R.id.editTextNumber);
        final Spinner concert = (Spinner) findViewById(R.id.spinner);
        TextView result = (TextView) findViewById(R.id.costResult);
        DecimalFormat currency = new DecimalFormat( pattern: "###,###.##");

        costBtn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                tickets = Integer.parseInt(ticketCount.getText().toString());
                choice = concert.getSelectedItem().toString();
                if(choice.equals("Life Revealed")){
                    totalCost = tickets * prices[0];
                }
                else if(choice.equals("Spatial Sense")){
                    totalCost = tickets * prices[1];
                }
                else{
                    totalCost = tickets * prices[2];
                }
                result.setText("Total Cost for "+tickets+" ticket(s) for " + choice +
                    " is: " + currency.format(totalCost));
            }
        });
    }
}
```