

King Abdulaziz University
Faculty of Computing and Information Technology
Computer Science Department

CPCS 202, Spring 2020

Assignment #2 – World Insurance Company

Published date : 8th March, 2020 (Sunday)
Submission date : 11:59pm on 17th March, 2020 (Tuesday)

Objective

The purpose of this assignment is to practice using loops, selections, and other basic features of Java in order to solve a real-world problem.

Note:

- This program is worth 4% of your final grade
- This is an individual assignment. Any form of cheating will result in receiving – 4% (less than zero) in the program
- This assignment must be submitted online via blackboard
- You are allowed to make a late submission, but there is a penalty. If you submit within 24 hours of the due date (so on Wednesday by 11:00PM), you will receive a 25% deduction from your total grade. You will not be allowed to submit after this date/time
- If files are empty or you upload the wrong files, it will be solely your responsibility, and you will be awarded a grade zero

Deliverables

You are required to submit the following on blackboard on or before the deadline

- 1) Your Java file named as follows : *A2_X_Y.java* where X is your section code and Y is your university id.

Your output should look exactly like the output given in the sample run. Also, at the top (start) of both files add comments which clearly indicate your name, student id, course number, section number, assignment number and your email id.

Marking Rubric

Will be posted on blackboard. Please refer to it online

Program 2 Description:

The World Insurance Company provides various range of insurance types which include: Life Insurance, Health Insurance and Car Insurance. Besides that, the insurance company provide number of sub-type insurance to meet the customer's need. For example, the customer might select Life insurance that covers him or her while he or she is in Saudi Arabia. Whereas, another customer who is frequently flying might consider paying for the life insurance that its sub-type covers worldwide.

The customer can pay for the insurance membership via two ways : from the insurance company representative who will help the customer to select the right insurance types and sub-types; and from the online form where the client needs to enter the amount of the selected insurance type. Furthermore, the insurance company allows the customer to claim or complaint online.

Program Details:

You need to display the main menu in a loop! Why? Because after the customer makes his choice, the menu should appear again. The customer can then either exit the system or perform other services.

Additionally, some of the sub-menus should be in a loop, constantly asking the user for his choice if/when an invalid choice is entered. See output for detailed examples.

All insurance and sub-insurance type information are given to you on the final page. Please use the exact information in those tables for your program.

Important:

1. There are many cases to consider. Make sure you study the output file CAREFULLY to make sure your program works 100%.
2. The BEST problem-solving strategy is for YOU to study the output and try to understand what is happening and how you can solve it in code.
3. Additionally, we give brief description on the next page for some components of your program.

Table 1 : Insurance Types

Insurance Type	Sub-type of Insurance	Annual Cost	Needed number of days
Life Insurance	Saudi Arabia	10000	10
	Gulf country	15000	20
	World wide	20000	30
Health Insurance	New Membership	3000	5
	Renew Membership	10% discount from 3000	1
Car Insurance	Fully comprehensive	4000	1
	Third-Party fire and theft	2000	1
	Third-Party	1000	2

Monthly Cost = (Annual cost/12)+ 20%

For example the monthly cost for Type: Life Insurance and sub-type : Saudi Arabia is
 $(10000/12)+ 20\% = \text{SAR } 1000$