

**COURSEWORK**

Program : [X] Diploma in Information Technology

Subject : PROGRAMMING CONCEPTS & PROBLEM SOLVING

Subject code : DIT 1253

Due Date : Week 5 (27 February 2023)

|  |  |
| --- | --- |
| **NAME** | **STUDENT ID** |
| **Cho Chun Wah** | **22117501** |
| **Clarence Cho Jin Heng** | **22117543** |
| **Ng Jun Yao** |  |
| **Shawn Yap Jun Onn** | **23003064** |
| **Tan Park Lum** |  |

**Group Member Contribution Form**

**INSTRUCTION**

The contribution must be signed by all members. 3 marks will be deducted from the total marks awarded if the group fail to comply with this requirement.

Group Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |
| --- | --- | --- | --- |
| **Student Name** | **Student ID** | **Signature** | **Role & Responsibilities**  **(e.g. create flow chart, C++ coding, etc.)** |
| Cho Chun Wah |  |  |  |
| Clarence Cho Jin Heng |  |  |  |
| Shawn Yap Jun Onn |  |  |  |
| Tan Park Lum |  |  |  |
| Ng Jun Yao |  |  |  |

**Marking Scheme**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criteria** | **Exceeds Requirements** | **Meets All Requirements** | **Meets basic Requirements** | **Marks** |
|  | **13-15 marks** | **10-12 marks** | **0-9 marks** |  |
| Technical  Correctness  15% | * No technical, syntax or structure errors * Able to achieve all the anticipated result | * Some technical, syntax or structure errors * Not able to achieve some of the anticipated result | * Many technical, syntax or structure errors * Not able to achieve most or all the anticipated result |  |
|  | **6-5 marks** | **4-3 marks** | **0-2 marks** |  |
| Problem Solving Logic  6% | * Excellent problem-solving logic * Able to cater for all the scenarios. | * Some deficiency in problem solving logic or problem-solving logic is not optimum | * Many deficiencies in problem solving logic |  |
|  | **8-6 marks** | **5-3 marks** | **0-2 marks** |  |
| Solution Design (PAC & Flow chart)  8% | * Well-structured PAC * The problem well analysed and solution provided accordingly. * Flowchart developed with correct notations and right flow. * Flowchart narrates the program flow completely. | * PAC is structured. * The problem is analysed, and solution is provided. * Flowchart developed with minor errors. * Flowchart doesn’t narrate the program flow as how the program is developed. | * PAC is structured * The problem is analysed, and solution is provided. * Flowchart developed with many errors. * Flowchart doesn’t narrate the program flow as how the program is developed. |  |
|  | **3 marks** | **2 marks** | **0-1 mark** |  |
| Comments  3% | * Useful comments to elaborate the meaning of a statement / a block of statements. * Comment place in a proper manner and not overwhelming. | * Contains some comments to elaborate the meaning of a statement / a block of statements. * Comment might not be placed in a proper manner | * Contains little or no comments |  |
| Best practices  3% | * Good programming ethics and practices and implemented many good programming styles. | * Good programming ethics and practices and implemented few good programming styles. | * Poor programming ethics and practices and implemented many good programming styles. |  |
| **Comments** | | | **TOTAL (35%)** |  |

PAC (Problem Analysis Chart)

Flowchart

False

Input category, type, number\_of\_participants

True

True

False

True

type< 1 || type > 5

category < 1 || category > 5

Start

True

False

True

False

False

fees = RM 50

fees = RM 60

type == 1

True

category == 3 || category == 4

False

fees = RM 60

fees = RM 70

type == 1

category == 1 || category == 2

End

Print sum

sum = fees \* number\_of\_participants

fees = RM 240

fees = RM 200

False

True

type == 1