Object-Oriented Development

(IT213N)

**GROUP ASSIGNMENT**

**November 2018**

**

# **Student Particulars**

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| --- | --- | --- |
| Name | : |  |
| IC Number | : |  |
| Student Number | : |  |
| CourseProgramme | : | DIIT |
| Intake | : |  |
| Subject Title | : | Object-Oriented Development |
| Subject Code | : | IT213N |
| Assignment Title | : | Group Assignment |
| Name of Lecturer | : | MsRosmah Ismail |
| Due Date | : | **26/10/2018** |
| College | : | SEGI COLLEGE, PENANG |

**Declaration by student:**

I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ,hereby declare that the attached assignment is my own work and understand that if I am suspected of plagiarism or another form of cheating; my work will be referred to the lecturer who may, as a result recommend to the Examinations Board that my enrolment in the programme be discontinued.

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**Date Signature of student**

# **Assignment Allocation of Marks**

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| --- | --- | --- | --- |
| **No.** | **Description of criteria** | **Marks** | **Marks Allotted by Lecturer** |
| 1 | Stage 1 | 20 |  |
| 2 | Stage 2 | 30 |  |
| 3 | Stage 3 | 10 |  |
| 4 | Stage 4 | 10 |  |
| 5 | Stage 5 | 10 |  |
| 6 | Stage 6 | 10 |  |
| 7 | Stage 7 | 10 |  |
|  | **Total Mark in 100** | **100** |  |
|  | **Weighting in overall coursework** | **15%** |  |

**Comment:**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Lecturer’s Name: Rosmah Ismail

Date:

**Question : GUI and Database (100 marks)**

**Group work – 4 members in a group**

You are required to design and implement a prototype model which covers some functions of your proposed title.

You have to proposed an object of a class. Implement the object and its behaviours.

Each member in a group is required to implement at least one behaviour of the object.

Example:

Object: ATM machine

Behaviours : Check Balance, Withdrawal, Money Transfer, etc.

There are a number of stages to the development. Each stage will be awarded the marks up to the maximum allocated ONLY when handed in AND accompanied by a relevant section in the final report.

**Stage 1:GUIs (max 20%)**

**Design the form** WITHOUT functionality (just the GUI appearance). You have to include suitable and relevant information on the form. Use appropriate GUI components (Buttons, textArea, ComboBox, Images, etc)

Note: You are allowed to use drag-drop facilities in designing your GUI. However, maximum mark awarded is 10%.

**Stage 2:A basic working version (max 30%)**

Implement the system whose GUIs you designed in stage 1. At this stage you are NOT expected to perform error checking for bad input such as an input quantity of ‘four’.

**Stage 3 : Saving data externally (max 10%, inclusive of report)**

Example: Use a Microsoft Access database.

**Stage 4:Improving your code and innovations (max 10%)**

Adapt the code to include at least two of the following

* error checking for input,
* displaying relevant pictures

**Stage 5:Demonstration(max 10%** )

You are required to demonstrate your prototype system.

**Stage 6 :Report (max 10%)**

A written report containing the evidence of all completed stages,which should include:

1. Introduction
2. UML class diagram and designs for the GUIs
3. A description of how you designed and developed the final code
4. Suitable screen shots of the program in operation
5. Details of any faults and failures, strenghts of your system
6. Conclusions and self-evaluation. For the self-evaluation you should write at least 200 words, that reports the following:
   * What did I actually achieve with this element of learning? Which were the most difficult parts, and why were they difficult for me? Which were the most straightforward parts, and why did I find these easy?How have I developed my knowledge and skills?

The written part (excluding code listings) should be no more than 2,000 words.

**Stage 7 : Group Work(max 10%)**

Your contribution in a group work.

This final deliverable is to be submitted to the coursework upload system (Blackboard) BEFORE THE COURSEWORKDEADLINE.

**Failure to upload deliverablesbefore midnight of the specified date will be a breach of the coursework rules and will result in your marks being reduced or failure of the coursework.**

Note: marks awarded based on the following criteria:

* Functionality(Basic and new features)
* Creativity in designing the system
* Successful demonstration
* Readability of the programs (indentation, meaningful variables names, comments, etc)

**Deliverables**

1. Demonstration of the level of functionality achieved. You will be required to give a short demonstration (about 10 minutes each) of your program in operation and to answer questions about it. You will be expected to demonstrate an understanding of the code that you have written and to explain your design decisions. This will be used to assess the level of functionality achieved.

2. All the files required to compile and run your application. It should be possible to copy your program to a PC at your school and run it from there without having to make changes to the code or have any additional software installed. If you carry out work on the coursework at home it is your responsibility to make sure that it runs at your school. Please be aware that the marker will look for similarities between your code and code submitted by other students.

3. A report in Word format consistin all items stated in Stage 6.

4. A CD consists of all the programs.

5. Upload to the BlackBoard system.

**You will fail if any of the following are true:**

• You do not carry out an acceptable demonstration.

• Your report is completely missing any of the required sections.

* No submission to the Blackboard on the due date.

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