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| ../ama%20university.png../AMAOEd.png | Course Code | ITE7101 |
| Description | Computer Programming 1 |
| College / Department:  **Online Education Department** | Course Project | 001 |
| **COURSE PROJECT** | | Page 1 of 3 |



This activity will assess your knowledge and skills in applying C++ program in VS code that satisfies specific requirements to attain specific output.

**Part 1:**

* Create a video presentation from the topics listed below. Select one (1) group of topics only.
* The video must include an introduction, discussion of the topic, and sample program creation using Visual Studio Code for each topic (if possible).
* The video should include yourself presenting the topics. For the visual content, the student may use different materials and style (e.g. PowerPoint, live discussion, paper discussion). **NOTE:** Make sure that your face is clearly seen on the video as well as the display on the screen.

**List of Topics:**

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| **Group 1**   * Problem Solving Through Flowcharts 1 and 2 * Handling Primitive Data Types * What about ifs |
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| **Group 2**   * Through the Loops * Dimensions of Data Types * Introduction to Functions Procedures |
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| **Group 3**   * Object-Oriented Programming 1 and 2 * It's All about Pointers and References 1 and 2 |

**Part 2:**

* Create a video that **shows yourself** doing the activity.
* The video should also show the screen of VS code as the program is coded.
* The output window should be seen in the video as data is entered and the corresponding output of the program is displayed.

Write a C++ program that will ask for the following input from the user:

Customer Name:

Age (should be 18 above):

Number of guests: (should be integer type)

Number of days: (should be double or float data type)

Determine the corresponding number of guests and rate per day as follows:

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| **Number of guests** | **Daily Rate** |
| 1 | 1000 |
| 2 | 1,800 |
| 3 | 2,700 |
| 4 | 3,600 |
| 5 (and above) | 4,500 |

Compute the total payment as follows:

Total Payment = rate per day \* no. of days

Down payment = 40% of the total payment

Balance = total payment – down payment

**NOTE:**

* Use your full name as customer’s name.
* User is not allowed to enter the age of 17 and below.
* Display an error message if the user enter an invalid value.

**Assume that the user will not enter an invalid value.**

Sample Input:

Customer Name: Juan Dela Cruz

Age: 25

Number of guests: 3

Number of days: 5

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Sample Output:

Hotel Reservation Slip

Customer Name : Juan Dela Cruz

Age : 25

Number of guests : 3

Number of days : 5

Total Payment : 13500

Down Payment : 5400

Balance : 8100

**Instructions to submit the activity:**

* Upload your video in YouTube or Vimeo then include the link together with the screenshots of your VS codes and program output in the space provided below.
* Save the activity file (Filename: LastnameFirstName- CourseProject\_ ITE7101.docx)
* Save the PowerPoint presentation (Filename: LastnameFirstName- CourseProject\_ ITE7101.ppt)
* Compress these files (.docx and .ppt) in one folder and save it as .rar/.zip file.

(Example: DelaCruzJuan-CourseProject\_ ITE7101.rar)

* Upload the .rar/.zip file on the submission page of the Course Project in the LMS.

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| Paste the Link of the Video recording here |
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**Attach the screenshots of the codes here:**

**Attach the screenshot/s of the program output here:**

**NOTE:** **Incomplete submission will not be accepted and will be required for resubmission. The highest grade for the resubmission is 50.**

**-----------------------------------------------Good luck!!!! ☺ -------------------------------------------------**