



### Assignment Cover Page

<b>Programme</b>		<b>Course Code and Title</b>	
Bachelor of Computer Science (Hons),		CSE3033/N Software Engineering	
<b>Student's name / student's id</b>		<b>Lecturer's name</b>	
1. 2. 3.		Tan Phit Huan	
<b>Date issued</b>	<b>Submission Deadline</b>	<b>Indicative Weighting</b>	
Week 2 – 6 Feb 2023	Week 11 – 14 April 2023	30%	
<b>Assignment title</b>	Assignment 2		

This assessment assesses the following course learning outcomes

# as in Course Guide	UOWM KDU Penang University College Learning Outcome
CLO1	Apply concepts derived from current theories of advanced software engineering.

# as in Course Guide	University of Lincoln Learning Outcome
LO1	Synthesise concepts derived from current theories of advanced software engineering
LO3	Utilise and evaluate advanced software engineering techniques and processes in the development of a software artefact

<b>Student's declaration</b>	
We certify that the work submitted for this assignment is our own and research sources are fully acknowledged.	
Student's signature:	Date:

### Dates and Mechanisms for Assessment Submission and Feedback

<b>Mechanism for handout to students</b>	Open Learning
<b>Mechanism for submission of work by student</b>	<i>Softcopy online submission via Open Learning</i>
<b>Date by which work, feedback and marks will be returned to students</b>	28 <sup>th</sup> April 2023
<b>Mechanism for return of assignment work, feedback and marks to students</b>	Feedback will be provided by a marking template. This will be available to students via Open Learning. The discussions at the walkthroughs will also provide informal feedback

### COURSEWORK SUBMISSION GENERAL INFORMATION

#### Academic Integrity Statement

You must adhere to the university college regulations on academic conduct. Formal inquiry proceedings will be instigated if there is any suspicion of plagiarism or any other form of misconduct in your work. Students must **NOT** collude with other groups of students or plagiarize their work.

#### Nature of the submission required

A softcopy of your assignment in **PDF version** should be submitted to lecturer, no later than the date and time stipulated on the cover sheet. In addition, an electronic copy of your work must be submitted to Turnitin. The first page of your report, immediately after the cover page, must be a page from Turnitin clearly showing your name and your Originality Score (Please refer to [submission arrangement](#)).

Diagrams may be used where they are helpful to support your arguments or description. If they are not your own work, the source must be referenced. Please help us to handle and mark your work efficiently.

Please take note for group submission, only **one submission per group**. This will contain both the group and individual elements. The individual element must be clearly labelled to indicate which group member completed the task.

#### Documentation guidelines

Student is required to submit a **SOFTCOPY** of the report and ensure that it use the following formatted styles: 1) Font type: **ARIAL**, 2) Font size: **11 pt.**, 3) Line spacing: **Single spacing** and 4) Page layouts: **Justify**. Please make sure you have proper format alignment for all paragraphs, following standard writing style and use **HARVARD CITATION STYLE** for citation. Please include a **HEADER** with the following information: **Student ID, Student name, Course code and Assignment type**. Please also include a proper cover page for your submission which contains

information about the students, assignment, course, and department with UOW Malaysia KDU Penang University College and University of Lincoln (UoL) logos on top. Also include page number and list of references, which is shown in the last page.

### **Penalties for Late Submission**

For late submission of this Assignment, a penalty of a reduction by 10% of the maximum mark may be applicable for each Calendar Day or part thereof that the submission is late. An Assignment submitted more than **TEN** Calendar Days after the deadline will have a mark of zero recorded for this Assignment.

### **Submission arrangement**

1. Cover page
2. Turnitin similarity report
3. Table of Content
4. Main Report
5. Reference List or Bibliography List (whichever applicable)
6. Marking Rubric (in landscape orientation)

### **Assignment instructions/Background**

#### **Tasks: Group Work (maximum 3 members)**

You are required to form a software team and identify one development methodology to design a new online time table scheduling system which able to help all faculty members and students to manage the time table. Some examples of the features are setup of the courses and semesters, student enrollment, arranging time table, publish and view the time table and etc. Your apps must focus on at least 3 aspects of the online time table scheduling system and support various roles such as administrator, academicians, and student.

Write a report in 2,500 to 3,000 words with the sections below:

#### **Section 1: Introduction to the Apps, Product Backlog and User Stories**

- Each team member can gather the software requirements via interview each of the roles, observation or article readings. It is suggested that each member to take up an aspect to study and explore. Briefly explain your data collection process. Write out the introduction of your apps.
- Develop a suitable product backlog with all the necessary information. Primarily, this document should capture as many user stories and developer stories as possible for this project by referring to INVEST criteria and SMART goals. Identify the weights of the user stories as well. Estimate how many sprints are necessary and divide the user stories according to their sprints, respectively.

#### **Section 2: Class Diagram Design**

Based on the requirements that you have gathered, produce a suitable class diagram with all the necessary methods and attributes. Ensure that the diagram has all the correct notations and relationships. If necessary, you can add any assumptions you have made.

### Section 3: Software Evolution

For each team member, present your software idea to the school administrator, academicians, or students. You can share your user stories too. Prompt them to give 2 feedbacks on how could the functionalities of your proposed features could be improved. Based on all feedbacks, construct 3 perfective changes which you would like to make for your software version 2. Explain your perfective change plan.

### Section 4: Software Testing

Suppose the software was already developed based on the user stories and class diagram, prepare a test plan that can test all the functionalities correctly. Ensure that you have covered all the required information so that you can check the program exhaustively.

Note: Remember to provide reference list to cite any supporting sources and facts.

### Marking Rubric – Project 1

Section	Failed (0-49)	Third Class (50-59)	Second Class Lower (60-69)	Second Class Upper (70-79)	First Class (80-100)	Mark
Section 1: Introduction to the Apps, Product Backlog and User Stories (40%)	The software is totally out of scope or does not contain much meaningful features, missing product backlog and user stories.	The scopes of software are explained but largely irrelevant. Many areas of product backlog and user stories are incomplete or incorrect.	The scopes of software are explained and minor area is irrelevant. 3-4 areas of product backlog and user stories are incomplete or incorrect.	The scopes of software are explained and relevant. 1-2 areas of product backlog and user stories are incomplete or incorrect.	The scopes of software are explained and relevant. All areas of product backlog and user stories are correct and precise.	Raw mark /100  Section mark /40
Section 2: Class Diagram Design (20%)	The class diagram design is not provided or totally in wrong UML diagram format.	The class diagram is given but it is not designed according to Section 1 entirely. Many notations and relationships are missing.	The class diagram is given and designed according to Section 1. 3-4 notations and relationships are missing.	The class diagram is given and designed according to Section 1. 1-2 notations and relationships are missing.	The class diagram is given and designed according to Section 1. All notations and relationships are correct with relevant assumptions made.	Raw mark /100  Section mark /20
Section 3: Software Evolution (20%)	No feedback process was attempted. No perfective change is proposed or totally irrelevant.	Minimum effort in getting feedback and largely irrelevant. The compilation of feedback to perfective changes proposal are largely incomplete and wrong.	Feedback inquiry is attempted. Feedbacks given are relevant but lacking of correct explanations to construct perfective changes plan.	Feedback inquiry is attempted. Feedbacks given are relevant and only minor errors in perfective changes plan construction.	Feedback inquiry is attempted. Feedbacks given are relevant and construction of perfective changes plan are detailed and concise.	Raw mark /100  Section mark /20
Section 4: Software Testing (20%)	No test plan is provided or all test areas are incorrect.	Test plan is provided but only white box or black box testing is given.	Test plan with both white box and black box testing are provided. 3-4 test cases are not appropriate or incomplete.	Test plan with both white box and black box testing are provided. 1-2 test cases are not appropriate or incomplete.	Test plan with both white box and black box testing are provided. All test cases are appropriate and described in detailed and concise.	Raw mark /100  Section mark /20
<b>Total Score:</b>						<b>/100</b>

Written comments area: