MONASH University

Assignment 3

Detailed Assessment Info
Last Update: 06/04/2020
Ver: 3.1

Learning Outcomes

1. Describe the breadth and nature of the software engineering process and distinguish various phases of the process;
2. Create and develop the required artifacts during each phase of the software engineering process;
3. Differentiate and evaluate the software engineering techniques used to produce the artifacts;
4. Employ group working skills in solving software development problems;

Assessment Task

Assessment topic: Software Design and Implementation
Assessment type: Individual and group assignment

Assessment tasks: This assignment is divided into two parts: A and B

Part A

Task 1: Detailed Class Diagram

You and your team will need to work out a CMS software detailed class diagram based on the best version of the initial class diagram. So, make sure you only start this task after you have finished assignment 2's task 1 (Initial class diagram).

If you and your team did not take enough notes or did not manage to correct the initial class diagram, please seek help from your mentor during tutorial or during the consultation before you begin on this assignment.

For a detailed class diagram, you and your team need to:

1. Incorporate boundary and control classes into your initial class diagram
2. Assign access/visibility modifiers and data types to the attributes in each class
3. Identify ALL the operations that need to be performed by the system and assign those operations to the appropriate classes, as methods with their access/visibility modifiers.
4. Include all the accessor and mutator methods, where appropriate.
5. Work out the formal parameters, as well as the return type for each method in your class
6. Add a stereotype (<<Entity>>, <<Boundary>>, <<Control>>) to each class
7. Revise the multiplicities and their directions
8. Where possible, add direction to the association relationships

In the detailed class diagram, you need to write all the methods for all the entity classes, however, for the control and the boundary classes, you need to write the methods that are related to the features or functionalities assigned to you (in the next task) for the implementation and also some other methods that you think must be part of your implementation such as methods related to login, logout, among others.

Task 2: Implementation

As a team, you should plan, schedule and collaborate to develop a product. Make sure you develop the same type of application that you showed during prototype presentation in Week 5. Otherwise, penalties apply (check marking rubric).

Each team must have the following basic functionalities/features. However, your mentor will assign you some other features (or functionalities) to implement for CMS software.

1. User registration
2. Conference Administration (any two reports)
3. A **manual**: Instructions on how to execute your product.
    a. Installation Guidelines: Describe how to install and run your product. It is necessary to provide screenshots showing the above.
    b. Troubleshooting: Any troubleshooting related information that you can provide.

Additional features will be:

- For teams of three, contact your mentor to get another feature/functionality during Week 6.
- For teams of four, contact your mentor to get another complex feature during your Week 6.

Throughout the implementation, if you have any questions regarding requirements or these instructions, make sure you ask your mentor.

Throughout the duration of this project, you will work as an agile team which will focus on using Kanban and Scrum in hybrid. Below is the information of the sprints that will be due for sprint review. To show how functional you are as a team, use Trello to manage and plan your tasks and daily standups to keep track of each other's progress.

Sprint	**Due**	**Features/Functionalities**
Sprint 1.0	During Week 7 tutorial	1. Detailed class diagram (Task 1) 2. User registration
Sprint 2.0	During Week 8 tutorial	Conference Administration: Any two reports ready to showcase (ask your mentor which reports to develop)
Sprint 3.0	During Week 9 tutorial	Additional features assigned to be showcased
Sprint 4.0	During Week 10 tutorial	Additional features assigned to be showcased
Sprint 5.0	During Week 11 tutorial	Additional features assigned to be showcased

Part B

Task 3: Demo your project

Scenario: The purpose of the demonstration is for the client to select a team that would be sponsored to finish the rest of the CMS project.

In week 12 tutorial,

1. Demonstrate features of your choice to your mentor (the client)
2. You also need to highlight the challenges met during the whole lifecycle of this project and
3. Any additional features that you would like to recommend to the client

You can begin the demonstration using presentation slides or a short video leading to real-time demonstration of your product.

You will have 20 minutes to demo your work to the class. Note this is teamwork, so everyone needs to be present and contribute towards this demonstration in one way or another. Failure to attend week 12 tutorial will result in zero marks for this part of the assessment.

You and your team need to be prepared to answer the questions from the audience at the end of the presentation.

Assessment Submission Details:

Submission requirements

Assignment 3A and 3B have different submission links.

For part A:

Your submission will be a zip file (Team_XX, where XX is your team number) containing:

1. **Implementation Code:** Submit all the code files. Note that you need to provide meaningful comments to your code. Confirm with your mentor if he/she wants to run the project on a specific IDE. Folder MUST be named as Implementation_Team_XX, where XX is your team number.
2. Your **version of sample data**: This would be a text file(s), excel file(s) or CSV file(s), depending on how the data is stored in your project and what sample data you have used to test your implementation.
3. Your **latest detailed class diagram** as a picture (png or jpeg). Name the file as Class_Diagram.png or Class_Diagram.jpeg
4. **A manual**: You need to create a manual for the end-user, name it as readMe.pdf.
5. **Contribution Declaration.pdf**: You must show the names of all team members. Also, include a brief statement of each member's contribution and percentage. A contribution template is available under this assignment title on Moodle.
6. **Group Cover Sheet**: Add the information of all the team members, student ids, signatures included.

One member of the team will submit the assignment on Moodle.

Part B:

File 1: Completed group cover sheet (available on Moodle > Assessments)

File 2: You will submit a video file or powerpoint file for task 3.

Please follow the following naming convention to name your files:

FIT5136_Team_X_Task_Y, where **X** is the **team number** and **Y** is the **task number.**

Example:

File 1: FIT5136_Team_404_group_coversheet.pdf

File 2: FIT5136_Team_404_Task_3.pptx

Individual assessment in a group assignment

CATME Peer assessment and contribution declaration will be performed to gauge the individual contributions to the group assignments. CATME will be made available at the start of Week 12. You must complete it only after your team has made the submission on Moodle **and** demonstrated the product during week 12 tutorial.

Total marks:

18% (part A) + 2% (part B)

Due date:

Part 1 due on Sunday, 23 May 2021, 11:55 PM

Part 2 demo during your week 12 tutorial. The presentation material must be submitted on Moodle by 28 May 2021, 11:55 PM

Where to find the marking Guide

You can find the marking guides assessment 3A and 3B titles.

Where to find help

The University provides many different kinds of services to help you gain the most from your studies. Further information is available at http://www.monash.edu/students.

You can also email role account for any issues related to the team, technical or material: fit5136.clayton-x@monash.edu

However, for any **assessment-related** issues, please contact your mentor or go to their consultation sessions that are made available on Moodle.

Extensions

Please email us at fit5136.clayton-x@monash.edu providing the reason and number of days you are requesting for an extension. After the review of your request, the teaching team will get in touch with you.

Special Consideration:

For information on applying for special consideration, please visit:
https://www.monash.edu/exams/changes/special-consideration

Late Penalty Statement:

Submission must be made by the due date otherwise penalties will be enforced.

You must negotiate any extensions formally with your campus unit lecturer via the in-semester special consideration process: http://www.monash.edu.au/exams/special-consideration.html

Late submissions are allowed with a penalty of 10% per day including weekends and public holidays.
Special consideration for group assignments must negotiate with your Lecturer or TA prior to submission of the form.

Plagiarism and collusion statement

Monash University is committed to upholding standards and academic integrity and honesty. Please take the time to view these links.

Academic Integrity Tutorials:
https://lms.monash.edu/mod/page/view.php?id=5666695

Student Academic Integrity Policy
https://lms.monash.edu/mod/page/view.php?id=5666699

Test your knowledge, collusion (FIT No Collusion Module)
https://lms.monash.edu/mod/page/view.php?id=5667198

Copyright statement