Project (45%)

The Project is consist of THREE (3) parts:
   a. Project Design (5%) → Submit by 11 June 2021, 11.55pm through eLeap
   b. Project Output (20%) → Submit by 14 June 2021, 8.00am through eLeap
   c. Contribution & QA (20%) → Project Presentation in Week 13

Project Description
Your group is hired by a nutritionist to build a Meal Diary (with Graphical User Interface using Java) that records the user's breakfast, lunch and dinner. For each meal, the users can perform the CRUD operations (create (add), read (view), update (edit) and delete) of the following:
   a. Image
   b. Name (e.g. nasi lemak)
   c. Food group (Fruits, Vegetables, Grains, Protein Foods, Dairy)
   d. Date
   e. Day
   f. Drink (e.g. Teh C Peng special)

Additionally, the users should be able to search for their past meals, and filter their search of meals based on the Food Group (Fruits, Vegetables, Grains, Protein Foods, Diary).

The Meal Diary should have the following basic functionalities:
   i.   add a new record
   ii.   view an existing record
   iii. edit an existing record
   iv.   delete an existing record
and the following two more advanced functionalities:
   v.   general search for their past meals
   vi.   filter search their meals based on the food group.

The exact implementation of the features is based on your own ideas and creativity. Please refer to the rubric on how to score marks for this group exercise.

For **Project design**, you are to design your project using the Unified Modeling Language (UML). Do refer to the rubrics for details of the design. Submit your project design document with the assignment cover in a **single .pdf** (named with your group name, e.g. MOTS.pdf) only by 11 June 2021, 11.55pm. If the document is not in .pdf format, your group will have 0 mark.

For **Project**, zip your java files and the assignment cover document and name the .zip file with your group name (e.g. MOTS.zip). Submit your .zip file by 14 June 2021, 8.00am. If the submission is not in .zip format, your group will have 0 mark.

Project presentation will be in Week 13. If you did not attend and present the project, you will have 0 mark. Booking of presentation slot will be available in Week 12.

IMPORTANT NOTE: Failure to follow the submission requirements, will result in penalty.

Rubrics

Part A: Project Design (5%)

	0m	2m	3m
Classes, Attributes and Methods [CLO1]	Less than 3 classes **OR for each class** Less than 2 attributes and methods	at least 3 classes **AND for each class,** 3 attributes AND 3 methods	-
Association (including inheritance, polymorphism) [CLO1]	Incorrect association between classes, AND missing inheritance and polymorphism	Classes are associated corrected with incorrect inheritance relationship and no polymorphism	All classes are associated correctly, with correct inheritance and polymorphism and matches with the project output.

Part B: Project Output (20%)

	0m	2m	4m
Number of implemented classes and interfaces [CLO2]	Less than 2 classes **OR** Less than 2 interfaces (not GUI)	2 classes **AND** 2 interfaces (not GUI)	3 classes or more **AND** 3 interfaces (not GUI) or more
Basic functionalities [CLO2]	Less than 2 from (i.) to (iv.) are working correctly	At least 2 from (i.) to (iv.) are working correctly	All basic functionalities, i.e., (i.) to (iv.), are working correctly, and have at least 7 days records of meals
General Search function [CLO2]	Does not exist / Is not working	Search query can only involve one field at a time, e.g., Search for records that fulfil the following criteria: *"breakfast"* or *"nasi lemak"*	Search query can involve two fields (or more) at a time, e.g., Search for records that fulfil the following criteria: *"lunch"* and *"vegetable"*

Filter Search Report [CLO2]	Does not exist / is not working	Can only generate a single, unfiltered report.	Can generate report that can be filtered by the food group.
GUI menu & Flow [CLO2]	Confusing / only text-based menu	Simple GUI menu with acceptable flow of program	Well-designed GUI and logical flow of program.

Part C: Contribution and Question and Answer (20%)

	0m	3m	5m	7m	10m
Contribution (CLO2)	No contribution to the project at all	Only code 1 class OR 1 interface	Code 1 class AND code 1 interface	Code more than 1 class AND code more than 1 interface	Code more than 1 class AND code more than 1 interface AND test/debug other members' class/interface
Peer Grading (CLO3)	**(Peer review form 5m. Available in Week 13)**				
	0m	**1m**	**3m**	**5m**	
Question & Answer (CLO 1)	Missing in action during Q & A session	Able to present but cannot answer the question	Able to present but partially answer the questions correctly	Able to present, answer the questions well and pinpoint in the code for the correct answer	

All the best!