Assignment 2 – Software Engineering 2

Assignment Type: Individual Assignment
Due Date: 8st May 2023
Submission: LearningMall
Submission Format: Git Repository, PDF
Total Weight: 10%

Learning Outcome:
B. Demonstrate a familiarity with approaches to software engineering research and development problems, as well as their advantages, disadvantages, and future research directions.
C. Understand the key technological drivers behind contemporary software engineering research.
F. Knowledge and understanding of the methods and issues involved in deploying systems to meet business goals.

Component Composition

Description

Component-based software engineering approach is based on the idea to develop software systems by selecting appropriate off-the-shelf components and then to compose them with a well-defined software architecture. Component composition is the process of **assembling components to create a system**. Composition involves integrating components with each other. During the composition of components, there may exist incompatibility between components such as parameter incompatibility, operation incompatibility, and operation incompleteness. Adaptor components address the problem of component incompatibility by reconciling the interfaces of the components that are composed.

Your job for this assignment is to provide solution for the below listed user stories by choosing the right off-the-shelf components and compose the components into a system for your user.

User Stories

1. As a website user, I would like to see a list of public holidays for a selected country.
2. As a website user, I would like to select the area (probably state, province, or city) I am residing as well as a public holiday from the list so that I can see: -
   a) The weather information for the selected public holiday in my area.
   b) The available short-term accommodation rental information for the selected day in my area.

Requirements

You are required to explore and discover the appropriate components for the solution. There

is no limit imposed on your selection of the components.

You can consider writing your website using more advance tools such as Vue or React. You can also consider writing your website using basic scripting tools such as Javascript. Please note that the marking process will NOT award marks base on the programming tools nor the attractiveness of the GUI.

Write a report to document your development process. The report should include at least the overview, the outline and analysis of the requirements, components selection and validation process, components composition, conclusion, and your source code (Including the access to your Git repository) in appendix.

Deliverables

1. Software solution (50%): Your complete project source code has to be available in a Git repository for public check out.
2. Report (50%): Naming of the report should be CPT304-CW2-*YOUR_STUDENT_ID*-REPORT.PDF. The report should be 5 pages maximum excluding a cover page and the appendix. Recommended formatting of the report is "12 points, Times New Roman, single spacing, normal margin 1 inch for top, bottom, left and right". For the source code in the appendix, you should take the screenshots from your programming IDE. The screenshots should be **WHITE** background with **BLACK** text.

Late submission policy

5% of the awarded marks for the assignment shall be deducted for each working day after the submission date, up to a maximum of five working days after which the assignment will not be accepted.

Note: The formal procedure for submitting coursework at XJTLU is strictly followed. Plagiarised work will be reported to the department and school exam officers for further actions.

Assignment 2 (Weighting: 10%)

1.1 Basic Information

Marker Name		**Date**	

1.2 Marking Details

Marking Criteria	**Item**	**Marks**
Reports (50)	Coverage / Level of detail (20)	
	Fluency / Succinctness (10)	
	Coherence (5)	
	Correctness / Accuracy (15)	
Software Solution (50)	Component acquisition (8)	
	Component composition (20)	
	Source code clarity and self-documentation (8)	
	Completeness (14)	
Total		

1.3 Comments by the Marker:
