BELLS
INSTITUTE OF HIGHER LEARNING

BELLS
INSTITUTE OF
HIGHER LEARNING

Project Assessment (Handout for Learner)

Module 2: Agile Front End Development with JavaScript

Approved Assessment Centre: BELLS Institute of Higher Learning Pte Ltd
Candidate Name:

BELLS
INSTITUTE OF HIGHER LEARNING

VERSION CONTROL RECORD

Version	Effective Date	Changes	Author
1.0	29th Aug 2023	First Edition	Program Creator: Chor Kun Xin Course Developer: Poh Soon Hock

Candidate's Name (as in NRIC):	
Candidate's NRIC (Please use last four figures of NRIC, e.g. "SXXXX123A"):	S/T XXXX _ _ _ / _
Assessor's Name:	
Assessor's NRIC: (Please use last four figures of NRIC, e.g. "SXXXX123A"):	S/T XXXX _ _ _ / _
Duration of Assessment:	
Allocated Duration:	15 mins
Start Time	
End Time	

Project Assignment

This **Project Assignment with Oral Clarification** is to gather evidence for the following learning Outcomes:

- LO4: Able to write a program that involves manipulation of variables, usage of programming techniques including function calls, branching and loops.

- LO5: Make use of complex data structures such as arrays and objects in programs

- LO6: Apply structured programming to write JavaScript applications

- LO7: Apply DOM selection methods to access and interact with HTML elements

- LO8: Explain the concepts of event driven programming and apply them to create interactive applications

- LO9: Apply an UI/UX framework, such as design thinking or the Five Layers of UI/UX, to refine the user experience and interaction of an application

- L10: Demonstrate how to perform asynchronous operations and work on their results when they are finished

- LO11: Explain the concepts of AJAX and make use of its asynchronous nature to request data from other services using the HTTP protocol

- LO12: Demonstrate ability to consume RESTFul API endpoints.

BELLS
INSTITUTE OF HIGHER LEARNING

Project Assignment – Portfolio

Agile Front End Development with JavaScript

Requirements

In this portfolio project, you will create an interactive **Create, Read, Update** and **Delete** application using vanilla JavaScript, CSS and HTML.

- The application must be developed with vanilla JavaScript, CSS and HTML. <u>No other frameworks are allowed</u>.
- Your project should feature a usable **graphical user interface** implemented with CSS and HTML
- The user must be able to perform CRUD on at least **one type** of object, resource or document (a todo task, a customer record, an expenditure etc.)
- Ensure that the application is mobile-responsive for at least one mobile device.
- The layout of the website should be aesthetically functional and cater to the needs of a specific target user group. It should be evident what problem(s) the application aims to solve and possess features aligned to the needs of the user group.

Marking Criteria

UI/UX

- The application must meet at least one pain point of a target audience group.

DOM Manipulation

- Modify at least **three** properties across **two** DOM elements.
- Exhibit proficiency in using at least two event handlers to enhance the interactivity of the application.

JavaScript Proficiency

- Your program must have at least one of the following:
  - At least one comparison operator
  - At least one logical operator
  - At least one function call
  - At least one branching
  - At least one loop
  - At least one custom function
- You need to use at least one **array** and at least one **object** in your program.
- Develop your program using the **structured programming** technique. Have at least one function which return value is used as the argument of another function call.
- Display the ability to perform at least one asynchronous call.
- Display the ability to fetch data from a JSON resource.
- You must execute at least one **GET** request via AJAX, and at least one of the following requests via AJAX: **POST, PATCH** or **PUT.**

Interaction Design and Development

- Allow the user to create instances of at least one type of resource, object or document
- Allow the user to see all created resources, objects or documents
- Allow the user to delete instances of at least one type of resource, object or document
- Allow the user to edit instances of at least one type of resources, object or document

Submission

- The project must be hosted on a Github repository and the link must be submitted via the LMS.
- A zip file of all the source code and assets required to deploy the project must be submitted via the LMS.

Oral Clarification for Project Work
- The duration of the Oral Clarification is 15 minutes
- The assessor will conduct an oral clarification to verify the evidence collected
- The assessor may ask additional questions if evidence presented is insufficient to ascertain competency of the candidate

Individual
This project work is an individual assessment