

Assignment 2

Objectives

Demonstrate intermediate web development using by applying the following skills:

- HTML, CSS, Responsive Web Design, JavaScript

Brief

Create an interactive web application for a main topic and minimum 2 subtopics, using only a one html (index.html), one css (style.css) and one javascript (main.js) file.

The topic should be educational and very familiar to you.

Users will learn something new after using your app. However, do not use movie or video games or any topics that is sensitive or offensive or controversial or against the law. It must be approved by the teachers before you proceed.

It should make use of a page management system to navigate among topics (while remaining on the same HTML page). Good have to a Mini-Game to demonstrate the topic. Use only Vanilla Javascript.

Required Folder Structure

The base folder should be named as LabNo_YourName_AdminNo_A2. All 3 files (html,js,css) should be in the base folder. There should be images, fonts, audio sub-folders for storing images, fonts and audio.

01_John_123456X_A2

```
| index.html
| style.css
| main.js
|---audio
|   audio1.mp3
|---fonts
|   font1.woff
|---images
    Image01.jpg
```

- All media (images, fonts, audio) must be downloaded and saved in the images/fonts/audio folder (local folder) renamed to proper naming requirements.No hotlinking.
- Do NOT use any libraries and frameworks (e.g. font awesome, bootstrap, tailwind, jquery, react, angular)
- Do NOT include your video in local folder. Instead host in youtube and embed inline in your webpage.

Deliverables

- Clean up unused code and files before submission.
- Compress/Archive the base folder your assignment in a .zip file (No .rar nor other formats)
- Name as **LabNo_Yourname_AdminNo_A2.zip** E.g. *01_John_123456G_A2.zip*
- Make sure yourname follows the *attendance* order in proper sequence of your first and lastname.
- Submit the compressed file to **Politemall** by the deadline.
- Once submitted, download back the submission to verify its correct and working.
- Screen recording of demo to be uploaded as *unlisted youtube link* with comments disabled
- Complete submission summary form <https://forms.office.com/r/3mQ6NKFRw8>

Late Submission Policy

- A penalty of 50% capped will be applied to the base score for assignments or projects submitted within 5 calendar days after the due date.
- Regardless if you pass or fail, any work submitted more than 5 calendar days past the due date will receive a score of zero.

Academic Integrity Policy

<https://mynypportal.nyp.edu.sg/content/dam/nyp-sp/dashboard/resources/general/Academic%20Integrity%20Policy.pdf>

Use of GenAI

[https://rise.articulate.com/share/J4wn5IEbwIFuuKTbH5bLKEvSy_qYk6K#/?](https://rise.articulate.com/share/J4wn5IEbwIFuuKTbH5bLKEvSy_qYk6K#/)

Implementation to best effort (non-exhaustive)

Description	Category
HTML Validation: https://validator.w3.org/	HTML/CSS
CSS Validation: https://jigsaw.w3.org/css-validator/#validate_by_input	
Proper indentation and line breaks for HTML/CSS	
Useful comments for HTML and CSS	
Apply proper HTML and CSS Techniques	
Apply CSS Animations	
Apply CSS Transitions	
Apply CSS Sprites	
Javascript Validation: https://beautifytools.com/javascript-validator.php	JS
Use of external JS file (not internal or inline JS)	
Use only vanilla Javascript (No external libraries)	
Proper indentation and line breaks for JS	
Useful comments for JS	
Select DOM using GetDocumentBy or Query Selector	
Add eventlistener in external JS code (not in HTML)	
Use of Timed Events	
Create JS Animations using CSS Positions	
Update CSS properties using JS	
Update content using JS	
JS conditions and loops	
Use Form Data	
Add/Remove/ToggleClass	
Ability to reset app without browser refresh	
Event Delegation (parent handling event for many child)	
Meaningful Interactivity	
Ability to use Audio	
Apply responsive design for 2 screen layout (desktop and mobile) using 800 px breakpoint	RWD
Different content layout and menus for different screen sizes, not see horizontal scrollbars or sub-containers.	
Proper page navigation for both sizes	
Mini Game working for both Desktop and Mobile	
Deploy online using GitHub Pages using Proper URL convention	Online Deployment
Full Screen Mobile Web App	
QRCode (URL to live website) visible on Desktop view	
QRCode invisible on Mobile View	
Max only 1 index.html , 1 style.css , 1 main.js file (total 3 files)	Organisation
Uncompressed total size <3MB	
HTML files should be under base html folder (named as: labno_name_adminno_a2)	
Images sizes to be optimized as per display need	
Use proper naming standards (HTML files end in .html, CSS files end in .css) in lower case Use valid characters a-z,A-Z,0-9,_(underscore),-(hyphen) only for naming filenames.	

Assessment Rubrics

	Criteria		Level of Achievement				
	Performance Level		Excellent (A)	Very Good (B)	Good (C)	Satisfactory (D)	Unsatisfactory (F)
	Score Range	%	Pass: 80 and above	Pass: 70 -79	Pass: 60 - 69	Pass: 50-59	Fail: Below 50
1	HTML/CSS	25	Most requirements for HTML/CSS were completed with quality, and additional efforts to demonstrate mastery in HTML/CSS	Many requirements for HTML/CSS were attempted and most were completed with quality	Some requirements for HTML/CSS were attempted and all were completed with quality	Few requirements for HTML/CSS were attempted and some were completed with quality	Very few or no requirements for HTML/CSS were completed
2	JavaScript	35	Most requirements for Javascript were completed with quality, and additional efforts to demonstrate mastery in Javascript	Many requirements for JavaScript were attempted and most were completed with quality	Some requirements for JavaScript were attempted and all were completed with quality	Few requirements for JavaScript were attempted and some were completed with quality	Very few or no requirements for JavaScript were completed
3	Responsive Web Design (RWD)	10	Most requirements for RWD were attempted and completed with quality, and additional effort to demonstrate mastery in RWD	Many requirements for RWD were attempted and most were completed with quality	Some requirements for RWD were attempted and all were completed with quality	Few requirements for RWD were attempted and some were completed with quality	Very few or no requirements for RWD were completed
4	Online Deployment	10	Most requirements of Online Deployment are followed accurately	Many requirements of Online Deployment are properly followed	Some requirements of Online Deployment are properly followed	Few requirements of Online Deployment are properly followed	Very few or no requirements of Online Deployment are followed
5	Organisation	10	Most requirements of organization are followed accurately	Many requirements of organization are properly followed	Some requirements of organization are properly followed	Few requirements of organization are properly followed	Very few or no requirements of organization are followed

Closed Book Quiz – 10%