School of Design and Informatics
Session 2024

HEP504: Web Development

Practical Assessment 2:
Final Project

Weighting: 75%

Due: Monday of Week 8 at 12:00 (noon)

Contents

Web Development Practical 2: Final Project

This practical brief outlines the second of two practical assessments which creates your graded portfolio for this module.

You can expand on your work for the first practical to complete this assessment.

You are expected to attempt all the tasks within this brief. However, if the work is unfinished or contains errors, please submit everything that has been undertaken and any incomplete work will be marked accordingly.

Scenario – Creating Your Own Social Media Website

As a web developer, expand on your previous work for this module to create your own social media website. Your website should be responsive and incorporate aesthetic design and usability principles. When planning your website, you should consider the legal and security standards and issues surrounding the development of a Social Media Website, the storage of user data, password information and encryption. You should read this brief in full before starting your project as it will give you an overview of what you should create for the assessment.

Practical Requirements

It is recommended that you break down the process of creating your website into manageable stages. Each stage should target the completion of one of the requirements below.

Requirement 1 - Planning and Documentation

Your social media website should contain the following web pages:

Home page - Login/out page - Registration page - Profile Page

However, feel free to add others if you desire.

Planning for your website before starting will allow you to spot potential flaws and iterate on your ideas faster.

With this in mind you should create the following:

- A navigation flowchart to indicate how a user would navigate the website.
- Pseudocode for functionality of each page.
- A simple database schema.

Requirement 2 - Responsiveness

Your website should showcase responsive design through the use of Bootstrap.
Bootstrap is used to create websites that render well on a variety of devices and browsers. You should ensure that your website utilises bootstrap to render well on at least desktop and mobile devices and two browsers of your choice.

Requirement 3 - Design and Usability

The website should have a clean professional look with usability at its core. Create your own aesthetic design for your website which should take into account the following:

- Accessible readable fonts
- Intuitive user interface
- An appealing colour scheme that is accessible
- Good contrast between text and background
- Usability standards and principles

Requirement 4 - Functionality

A social media website can include many different features and you may implement anything that you think might be of benefit for your project and ensure all functionality is intuitive.

Your website must include the following.

- Use of PHP to enable:
    - The retrieval of this data to generate profile pages dynamically based on the user ID passed in the URL.
    - A search bar that allows users to find other existing profile pages.
    - Reading from a database - to view posts and comments.
    - Writing to a database – to create new posts and comments.

- A user login/out system with JavaScript DOM Events that inform the user they have successfully logged in or entered the wrong information.
  Note: Users that have not logged in should not be able to make posts or leave comments

- A system that allows users to "Like" posts using JavaScript DOM Events

- User registration form with 2 user levels, that writes user data to the database.
    - Level 1 users should be able to make posts and comments.
    - Level 2 users should be able to make posts, comments and delete them.

- Password data management
    - A method of encryption should be implemented to protect passwords.

Requirement 5 - Content

Throughout this module you will have experimented with many different ideas and website concepts, and you should choose which ones you think would fit your social media website and implement them.

However, your website should include the following content:

Content	Instructions
Website logo	Include the logo on each web page. You can create a logo or use a copyright free image
Bootstrap JS Carousel	Include in the homepage. You can create images or use copyright free ones to feature in the carousel
A search bar	This should allow users to find and visit the profiles of other users
An example user profile	The profile should include a profile picture, username, and a space below to make posts
An example profile post	The post should include a picture and text and have space underneath for users to make comments. You may use one of the articles featured in your first assessment for the post or you can write about something else with a copyright free image
An example comment	This comment should appear under the example post

The Report and Word Count

Ensure that your report efficiently describes the work that has been undertaken to address this assessment, a critical evaluation of your work and a justification of your decisions in the design and implementation of your including your website.

A section within your report should be devoted to the legal and security standards and issues surrounding the development of a Social Media Website, the storage of user data, password information and encryption.

Cover the usability considerations you have implemented as well as ones you may not have but would like to implement if the website was to be further developed.

Include screenshots of each of your webpages on the browsers and devices you have targeted to render well on using bootstrap alongside an explanation of how well your website has met the responsiveness requirement.

The report for this assessment should be 1500 words with a margin of +/- 10%, excluding the Reference and Appendix sections.

Refer to the ModuleAssessmentBrief document for a general idea of the report layout and if you are unsure of anything feel free to ask questions in the Module Q&A within the 'Discussions' tab on Canvas.

Grades

Please consult the rubric for this practical assessment on canvas, a link to the rubric will appear alongside the download option for this brief. This assessment contributes 75% of your final grade for the portfolio for this module.

Other Details

For all other details including:

- Report Format
- Mitigating Circumstances
- Late Submission
- Feedback
- Plagiarism
- Use of AI in this Module

Submission Instructions

- A report covering the work undertaken for this assessment, in PDF format
- A URL to your website on the server (included in your report)
- Artifacts
  - A Navigation Flow Flowchart
  - Pseudocode, database schema, and any sketches, or other planning documents
  - Your database's source code
  - Your website's source code
  - Any other files you have created in the process of undertaking this project

Your report containing your URL should be submitted alongside a singular compressed file (.zip etc.) that contains all artifacts listed above. The zip file should be named: (YourName_YourStudentNumber_Practical2.zip).