WEB APPS

ASSESSMENT 1: Social Media Clone

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Contribution towards overall module mark	100%
Date set	30 October 2020
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DEADLINE DATE	31 Jan 2021 - 11.59

Assessment 1: Social Media Clone

The Brief

You are tasked with building a social media web app that ‘clones’ typical features/functionalities of existing products in service. The app needs to include the following features:

- Users should be able to:
  - Register
  - Log in and out
  - View / update their profile
  - Reset their password
- The ability for users to post content, at a minimum this should include:
  - Posts
  - Images
  - Comments
  - Likes
  - Tags
- Users should have the ability to comment on other users posts
- It should be possible for a user to edit and delete previously created entries
- It should not be possible for users to edit or delete content they did not create
- Basic security requirements should be in place:
  - It should not be possible to perform SQL injection attacks (query parameters should be escaped)
  - It should not be possible to perform XSS attacks (any data input by a user should be escaped / cleaned before it is output to the page)

You may include additional features as appropriate.

Deliverables

- A project folder / zip archive that contains all required code files and assets. This should be the root htdocs folder of the project.
- A GitHub URL to the project source code. The code in the GitHub repository should match the code in the project folder / zip archive delivery.
- A publicly accessible URL to the deployed application (if you have managed to complete this step).
- A 1000-word development document, which should include a wireframe of the web app design, and a diagram of the app database design.

The Development Document

Your multi-device application must be accompanied by a development document of a minimum of 1000 words (there is no maximum word count).

Please include the following elements (note the suggested word counts):

- *Brief:* A short explanation of what you have been asked to create (~50 words).
- *Specification:* A short understanding of the conceptual focus and key features of your web app (~100 words).
- *Design and Technical Description:* A clear description of how the web app functions. For example, by what mechanism does a user log in? How do they post content to the app? (~400 words).
- *Database Design:* A description of the web app database models, and a diagram of the web app database design. Each table in the database should be shown, along with clear indications of how the tables are related to each other (~150 words).
- *Wireframe:* A wireframe diagram showing all of the web app screens.
- *Critical Reflection:* A critical evaluation of the successes and limitations of your web app. This should also describe what personal learning you need to pursue in future to refine your skills (~300 words).

Submission

Please follow the submission instructions below. Work that is submitted incorrectly may not be accepted or could incur a points penalty.

Before submitting have you…

- Checked that any digital work is functioning as expected?
- Spell-checked and grammar-checked any written work that accompanies your digital work? Please make an appointment with the Writing and Learning Centre or speak to your tutor if you are experiencing challenges in this area.
- Formatted your written work to the specification below?
- Referenced all sources of information accurately? Please refer to www.citethemrightonline.com (Harvard) for guidance.

Your work must be submitted via Turnitin. Please adhere to the following method:

- Paste the URL of your web app live online and project files on Google Drive into a Word document. You may also wish to include the URL to your GitHub repository.
- Attach your development document to your Word document.
- Log into Minerva and go to the Assessment tab (or use the link in the Aula 'Assessment' section), and submit your Word document via the appropriate Turnitin link.

Format

Your code should be neat, accurately formatted (indented/spaced) and include code commenting. This is general good practice, but also a requirement of the brief that is assessed via the marking criteria.

The project source code should be available in a public GitHub repository, and a working instance of the application should be running and available for testing online at a publicly accessible URL.

All written work must conform to university styling and submission guidelines. They must:

- Be word-processed using a conventional font and size (e.g. Times New Roman, 11 or 12) and 1.5 or double line spaced.
- Contain appropriate in-text citation that supplies an accurate list of references.
- Be accurate in referencing. See Bath Spa guidelines and the Harvard system described at www.citethemrightonline.com.
- Be accurate in spelling and paragraphing.

Marking Criteria

Assessment 1: Social Media Clone will be marked against the following criteria:

1. *Design:* Quality of the overall application design, including the front-end (visual design and user experience), back-end and database.
2. *Implementation:* Technical implementation, selection and application of techniques, and code readability.
3. *Documentation*. Quality and accuracy of the development document and how it relates to the design and implementation.

Criteria	Weighting		Marks
Design	35%	A highly limited design that pays little to no attention to the quality of system design or user experience. Key design documents such as the database diagram and wireframe are likely missing.	0 - 19 (Low Fail)
		A poor design that demonstrates some attempt to produce a functional database design, yet overall it lacks coherence. System design overall is likely ill-considered and may require significant rethinking. User experience is considered but with a major limitations,	20 - 39 (Fail)

		and key design documents (database diagram and wireframe) are likely poorly presented or incomplete.	
		A basic design that presents a coherent database structure and pays modest attention to user experience. System design is adequate yet there is significant room for efficiencies. End product may not be suitable for future extension. Database diagram and wireframe may be provided, yet they are likely limited in the scope of information presented.	40 - 49 (Third)
		A fair design that demonstrates a sound approach to web app design. System design is appropriate and meets all key specifications listed in the brief, yet there is ample room for refinement. User experience has been considered with several justifiable design choices made. The database diagram and wireframe are useful, yet further detail is likely required.	50 - 59 (2:2)
		Design demonstrates a good understanding of all aspects of web app design, including database structuring, back-end development and front-end user experience. All key specifications listed in the brief are likely considered, with minor to modest extensions where appropriate. Database diagram and wireframe are well presented with only minor omissions in detail.	60 - 69 (2:1)
		A very good piece of web app design that evidences attention to detail in all areas. Overall system design including database and back-end is well	70 - 79 (First)

		considered, efficient and perhaps extendable. Web app offers a pleasing user experience, and the final product is likely responsive to a range of target devices. Database diagram and wireframe are informative and presented to a good standard.	
		An excellent piece of web app design that pays close attention to user experience, likely across a number of target devices. System design is of a high standard, demonstrating a deep understanding of full-stack implementation. Database diagram and wireframes are very well presented, and additional design mock-ups may be presented. Work likely exceeds the requirements listed in the brief in a compelling way, demonstrating a professional approach overall.	80 - 89 (High First)
		Beyond expectations for this level of study.	90 - 100 (Outstanding)
Implementation	45%	A very limited piece of web app development that does not meet the requirements of the brief. Selection of client- and server-side techniques may be inappropriate, and the final result will likely be non-functional in several critical areas. Code readability may require significant overhaul with code commenting poor or missing.	0 - 19 (Low Fail)
		A poor implementation with major errors that may render the final result non-functional. Selection and application of front- and back- end development techniques will likely be	20 - 39 (Fail)

		substandard, leading to a set of code files that are inefficient and ill-considered. Code readability may be poor with code commenting failing to adequately annotate key techniques deployed.	
		A basic implementation that demonstrates limited knowledge of essential techniques for web app development. There will likely be modest to occasionally major errors in the use of front- and back-end development techniques leading to a piece that is moderately functional. Code readability may not be satisfactory, and code commenting is likely only adequate.	40 - 49 (Third)
		A fair implementation that demonstrates a modest understanding of the key processes required to create a web app. Implementation likely has several minor errors, yet these do not overly affect functionality overall. A range of front- and back-end development techniques are demonstrated, yet there is likely room for significant optimisation in several areas. Code readability and commenting is sound but may require additional attention.	50 - 59 (2:2)
		A functional piece of web app development that deploys largely appropriate front- and back-end development techniques, yet most to all of these are introduced in class. Implementation may benefit from further optimisation, and there may be minor errors related to code readability and commenting.	60 - 69 (2:1)

		A very good implementation that deploys appropriate front- and back-end development techniques. Web app is well structured, readable and efficient with only minor errors in optimisation. The application is fully functional and demonstrates an ability to extend knowledge acquired in class sessions.	70 - 79 (First)
		A highly accurate and optimised piece of web app development that goes far beyond the requirements of functionality. Intended design has been implemented with precision, and a range of well-selected features have been incorporated. A wide range of appropriate front- and back-end development techniques are demonstrated, likely including several methods that were not introduced in class. Implementation approaching professional standards.	80 - 89 (High First)
		Beyond expectations for this level of study.	90 - 100 (Outstanding)
Documentation	20%	Very limited documentation that demonstrates little or no understanding of the design and build process. Critical reflection is missing or inadequate. Structure is unacceptable.	0 - 19 (Low Fail)
		A poor attempt that does not meet the requirements of the development document. May be missing key sections or badly structured. Inadequate technical description and/or critical reflection.	20 - 39 (Fail)
		Basic documentation that offers only minimal information about the design direction and technical implementation.	40 - 49 (Third)

		Correct use of technical terminology is lacking and critical reflection is limited in depth. Structure is acceptable.	
		A fair attempt that provides only key information about the design and technical implementation. May be limited in the clarity of the technical description and depth of the critical reflection. Document structure is acceptable.	50 - 59 (2:2)
		A good to very good development document that provides a clear overview of the design direction and a sound description of the technical implementation. Critical reflection is adequate, but may be limited in depth. Document structure has only minor issues.	60 - 69 (2:1)
		Very good overview of the project that provides detailed description of the concept design and technical implementation. Structure is without error. Critical reflection is well considered.	70 - 79 (First)
		An excellent overview that provides a high level of insight into the design and technical implementation. Reflection is highly critical and detailed. Structure is without error.	80 - 89 (High First)
		Beyond expectations for this level of study.	90 - 100 (Outstanding)

Intended Learning Outcomes (ILOs)

ILO	Assessed

Effective database design that is informed by standard models, identified read/write capabilities and key security requirements.	✓
An ability to select and implement a range of PHP and AJAX data handling strategies.	✓
The deployment of SQL, PHP, HTML5 and JavaScript to serve dynamic content to an end user.	✓
The synthesis of database design standards and responsive web design techniques to create fully functional web apps.	✓

Mark penalties may be applied to late submissions without prior approval of an extension. Please ensure that you prepare and submit your work in good time to allow for any issues that may arise.