CM3050 Mobile Development

Project Idea Title 1: Task manager mobile app

What problem is this project solving?

An application that provides a simple way of logging a series of tasks to complete. Presenting them alongside the necessary information required complete them such as notes, attachments, calendar information, and the timeframe in which it is required to do complete them.

What is the background and context to the question above in 150 words or less?

As our preference digital events management increases, while traditional forms are gradually deprecated we are presented with increasing opportunity to use mobile applications to help manage our daily workflow. To date, few mobile applications manage to well-present data from a wide-range of sources in a simple, accessible format.

List some recommended sources for students to begin their research

- Background research: PC Mag best to-do list apps: https://uk.pcmag.com/productivity-2/90672/the-best-to-do-list-apps-for-2020
  - Firstly, look at the current apps on the market, what do they all do well? Are there discrepancies between apps? What features could you include that would differentiate your application from others?
- Game-ification of task management apps: https://hcigames.com/wp-content/uploads/2015/01/Deconstructing-Gamified-Task-Management-Applications.pdf
  - Understand the various approaches to creating task management apps, including producing 'gamified' incentives to complete tasks
- What a to-do: studies of task management towards the design of a personal task list manager
  https://www.academia.edu/4323375/What_a_to_do_studies_of_task_management_towards_the_design_of_a_personal_task_list_manager?auto=citations&from=cover_page
  - Study what elements and formats best suit task management apps, including which are best for overall productivity

What would the final product look like?

(e.g. presentation, usability, functionality, results)?

The final production should be a fully functioning mobile application that allows users to input a series of different tasks to complete. Your app should include the functionality to mark these items as 'completed'.

You should integrate multiple forms of connectivity to useful tools and apis, possible including calendar integration, weather prediction apis, time predictions etc.

You could even combine productivity data with machine learning to analyse working habits and suggest timeframes for completion.

At least, it should be simple, easy and reliable to use. With a clearly thought through user interface with appropriate and accessible styling throughout. It should be responsive and work for a wide-range of devices.

What would a prototype look like?
What would it show?
What does it need to prove?
*What **IS** important to make clear?*
*What is **NOT** important at this stage?*

A simple prototype should include basic functionality so that you can easily demonstrate the purpose of the application.

This would include the ability to add tasks, mark them as done, add and edit timeframes. Additional features including calendar intergration might be mocked up and implemented at a later stage.

You should be able to test the complete user flow to check for usability issues.

What kinds of techniques/processes are relevant to this project?
- User flow diagrams
- Wireframing
- Iterative development
- User testing
- Unit testing
- React Native development is highly suggested

What would the output of these techniques/processes look like?
- Fully completed user flow diagrams demonstrated the expected user flow between multiple pages. Including breakdowns of key actions and events, such as adding items to the list, altering them and marking them as complete.
- Wireframe diagrams at mid to high fidelity, demonstrating the planned layout and UI of the application.
- Continual testing on potential users, collecting feedback and making appropriate changes to the application.
- A series of well-built unit tests to check both the logic and UI of the mobile application.

How will this project be evaluated and assessed **by the student** (i.e. during iteration of the project)?
What criteria are important?
Students should gather iterative feedback from potential uses throughout the entire development stage. This feedback should be collated and acted upon accordingly.

For this brief, what would a **minimum pass** (e.g. 3rd) student project look like?
- A basic application that allows some form of tasks to be inputted and stored on the system.

- The application lacks significant organisation-focused features, including timeframe suggestions or tracking.
- The written report mentions basic elements of testing that were collected during development, yet fails to outline how these had an impact on the final application.
- Little to no use of user-flow diagrams or wireframes

For this brief, what would a **good** (e.g. 2:2 – 2:1) student project look like?

- An application that provides the ability to add tasks and see them alongside organisation-based tools and suggestions including timeframe suggestions or calendar integration.
- The application used user-testing to carefully select integration with third party services, and this is evident in the written report.
- Clear link between feedback and development progress, backed up with altered wireframing or user flow diagrams.
- A confident application that could be used in day-to-day scenarios

For this brief, what would an **outstanding** (e.g. 1st) student project look like?

- An application that has clearly been developed as a result of extensive market analysis and research with articles and papers cited alongside key decisions made, documented in the written report.
- Clear and concise user testing throughout development, aided by wireframing and associated techniques.
- Production ready product that could be submitted to an app store.