CMP3035M Cross-Platform Development

Learning Outcome	Criterion	Pass	2:2	2:1	1st
[LO2] Design, prototype, and evaluate mobile applications using hi-fidelity approaches, based on well-developed user scenarios	**Concept** **Weight: 15%**	The design and features of the app are based on an adequate user scenario for the chosen mobile moment. A cursory look has been taken at similar apps.	The design and features of the app are a response to a well-developed user scenario based on an interesting mobile moment. Detailed requirements are justified. A comparison of competing applications has resulted in specific design decisions.	The design and features of the app go beyond the obvious requirements for the chosen mobile moment. Design decisions can be traced back directly to a well-presented user scenario. A thorough analysis of competing applications has clearly identified how the app was influenced by them.	The design and features of the app are a novel response to the chosen mobile moment and is excellently described and motivated. An in-depth analysis illustrates how the app clearly separates itself from any competitors and has learned lessons from them.
[LO2] Design, prototype, and evaluate mobile applications using hi-fidelity approaches, based on well-developed user scenarios	**Prototyping** **Weight: 20%**	The iterative process has been described but design justifications are weak. The insights from the concept stage have been taken into account. There is no evidence of user testing beyond reflections from the developer themselves.	The iterative process has been described well with clear design justifications. The iterative process makes good use of knowledge gained from the concept stage. Different prototypes have been evaluated with users which have directly influenced the development.	The iterative process is well documented with good discussions of different prototypes and their advantages and shortcomings. The prototypes are clear responses to the requirements from the concept stage and explore them in a meaningful way. Thorough evaluations have been used throughout with users. This has resulted in clear and thoughtful design decisions.	An excellently described iterative process that lays out the design process and follows logical steps and conclusions. The prototyping is shaped by the original design requirements in each stage and critically reflects on them within the design process. Regular evaluations were thoroughly planned and conducted. The different target groups for the app are well represented. Insights from the evaluations have clearly shaped the unfolding design process.
[LO3] Develop cross-platform mobile applications utilizing industry standard tools and technologies	**Final App: User Experience** **Weight: 30%**	The user experience of the final app is basic but adequate. The app has been deployed on at least one physical device and not just an emulator.	The app provides an engaging user experience across all platforms. The app has been deployed on at least two physical devices with different operating systems.	The app provides a high-quality user experience by following best practice guidelines for mobile design. The app has been deployed on at least two physical devices with different operating systems. In addition, the app has also been emulated on a variety of devices with different screen sizes and resolutions.	The app showcases a professional user experience across devices and is almost indistinguishable from a native app. The app has been deployed on at least two physical devices with different operating systems. In addition, the app has also been deployed on a variety of devices with different screen sizes and resolutions that include low- as well as high-end devices.
[LO3] Develop cross-platform mobile applications utilizing industry standard tools and technologies	**Final App: Functionality** **Weight: 30%**	The app implements the expected core functionality in an adequate way.	The app implements at least one meaningful feature that goes beyond basic functionality, and does so in a convincing way.	The app meaningfully implements more than one challenging feature or several basic features in an especially clever way.	The app is of a high technical challenge and shows a deep understanding of appropriate development approaches.

[LO1] Critically assess the implications and constraints of native mobile development in comparison to platform agnostic approaches	**Reflection Weight: 5%**	A basic overview of advantages and disadvantages of cross-platform development approaches.	Personal experiences from developing the app are used to illustrate the most salient advantages and disadvantages of cross-platform development approaches.	Personal experiences from developing the app are used to discuss advantages and disadvantages of cross-platform development approaches in detail. A discussion critically assesses the suitability of such a process for different development scenarios.	The personal experiences from developing the app are used to critically discuss advantages and disadvantages of cross-platform development approaches. A discussion leads to a clear and well-motivated assessment of when such an approach should be chosen.