UCCD3223 Mobile Application Development

Group Assignment

# Topic

Considering that our life is still being impacted by the ongoing Covid-19 pandemic. Even though the government is opening up the country and relaxing standard operating procedures (SOP) that govern our day-to-day activities, it is increasingly apparent that the many variants of the coronaviruses are here to stay. We need to adapt to living life with these viruses around. This presents opportunities for new/innovative/different applications to fill the void created by this new reality. For example, in the education sector, students are now allowed back to schools. But they can only attend face-to-face classes on alternate weeks. People can also dine out, but they will often opt for restaurants that are well ventilated and not too crowded. Many office workers are given more flexible working arrangements, e.g. remote working from home, online meeting with clients increasingly more acceptable etc.

Your group assignment is to take this opportunity to propose, design and develop a mobile application that can help address new problem space that arise as a result. There is no restriction on what kind of application you can develop, but creativity and novelty of the app will be taken into consideration. Even if the app is not novel, please at least make sure that it is a useful one! Bear in mind that the motivation behind developing a mobile application can be manyfold. Not everyone can come up with ground-breaking idea that is impactful or transformative. Some try to improve on existing applications because they believe they can do things better. Some are motivated by the monetary rewards or recognition from developing a successful application. But whatever it is, ultimately the application needs to be purposeful. Application need not be a huge success to justify its value. If your application can get some people to use it, and continue to keep using it, it means that your application is accepted by those users. It may not appeal to everyone, but most things around do not appeal to everyone anyway. Some just appeal to people more than others. You need to find your target users, however niche that is.

The minimum requirements for your application are:

1. It has a launch icon customised according to your logo.
2. It can store or update user data persistently in mobile device or cloud storage AND retrieve from it.
3. It can access data hosted externally (outside mobile device) via web services or web Application Programming Interface (API) or Software Development Kit (SDK).

TIPS:

First, your mobile application needs to be purposeful, that it has a strong use case for its existence. If there already exist such applications, in fact many of them around, and are well recognised, then be reminded of the law of diminishing returns. That it may not be worth putting great effort into such undertaking. Move to another idea. Secondly, the mobile application needs to be user friendly. No matter how well intended your application is, if it is not usable, then it is going to be a failure. Last but not least, your mobile application SHOULD be aesthetically pleasing to the users.

**Assessment:**

Your group is expected to achieve the bare minimum requirements as listed above for this assignment. Your group may add in additional functionalities and/or features, as long as they work and are meaningful.

**Deliverables:**

This assignment has two deliverables:

1. A written proposal for your group’s idea on the mobile application to develop.
2. A WORKING mobile application that can demonstrate your idea and concept.

**Submission Rules:**

1. Submitted report must use the respective cover page as provided
2. Submit a soft copy via Google Form by 5:00 PM on the submission date
3. After 5:00 PM it is strictly regarded as LATE SUBMISSION
4. 10 marks will be deducted for Late Submission every 24 hours after the submission deadline

**Group Size:** 4 persons

Note: Plagiarism is strictly prohibited. Penalty will be imposed on those who plagiarise

**Part 1:**

Register your proposed idea, together with group details, in this spreadsheet:

<https://docs.google.com/spreadsheets/d/1rNCNyZ9ugSSkdMOOaq-7VuhJ8z6XGOYH59fnzPR7UZI/edit?usp=sharing>

Write a simple proposal to introduce the idea and concept of your proposed mobile application. The report must also indicate how the application would achieve the minimum requirements. In addition, include research on applications available in the market that might be similar to the app you are proposing.

The report must be within 4-10 pages, any pages falling outside of the range will NOT be assessed. Cover page is not included in this limit. Please remember to include a title for your report.

**Marking scheme:**

1. Creativity/novelty/usefulness of concept (40%)
2. Completeness of idea (30%)
3. Design – mainly UI (20%)
4. Neat documentation layout (10%)

**Total Marks:** 100% (contributes 10% to final)

**Due Date:** Week 5 Friday (25 February 2022) before 5:00 PM

**Part 2:**

Complete the proposed application. Write a short report to document the developed application, including features or functionalities that you did not manage to implement in time. Please also provide sample screenshots of your app.

Keep the main report under 10 pages, with relevant source code of your application to be attached as Appendix at the end of the report. Please remember to include a title for your report.

**Marking scheme:**

1. Program completeness with implemented functionalities (30%)
2. Actual design and creativity (10%)
3. Commercial values (5%)
4. Tidiness of source code (5%)
5. *\**Documentation – with clear labels of the roles of each member, and/or which section (including source code) is contributed by which member (20%)
6. *\**Presentation: up to 10 minutes to group present and demonstrate your mobile application (15%). During Q&A you will also be assessed individually on your technical contributions to this group assignment, through your understanding of the design and implementation of the developed application (15%)

*\*marks to be given based on each individual*

[Extra marks for application published on Huawei AppGallery]

**Total Marks:** 100% (contributes 20% to final)

**Due Date:** Week 12 Wednesday (13 April 2022) before 5:00 PM

**Presentation Date:** Week 13 (during Practical and Lecture Sessions)

**UNIVERSITI TUNKU ABDUL RAHMAN**

**Faculty of Information and Communication Technology**



**UCCD3223 Mobile Applications Development**

**(January 2022 Trimester)**

**Group Assignment 1**

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| --- | --- | --- | --- | --- | --- | --- |
| **Name** | **Student ID** | **Course** | **Practical Group** | **Group ID** | **Group Name** | **Tutor** |
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| **Marking scheme** | **Marks** | **Remarks** |
| Creativity/novelty of concept | **X 4** |  |
| Completeness of idea | **X 3** |  |
| Overall design | **X 2** |  |
| Neat documentation layout | **X 1** |  |
| **TOTAL** | **/100** |  |

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**Group Assignment 2**

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| --- | --- | --- | --- | --- | --- | --- |
| **Name** | **Student ID** | **Course** | **Practical Group** | **Group ID** | **Group Name** | **Total** |
|  |  |  |  |  |  | **/100** |
|  |  |  |  |  |  | **/100** |
|  |  |  |  |  |  | **/100** |
|  |  |  |  |  |  | **/100** |
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| **Marking scheme** | **Marks** | **Remarks** |
| Program completeness & functionality | **X 3** |  |
| Actual design and creativity | **X 1** |  |
| Commercialisation values | **X 0.5** |  |
| Tidiness of source code | **X 0.5** |  |
| **SUB-TOTAL** | **/50** |  |

**Individual marking scheme for Documentation, Presentation and Q&A**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Documentation** | **Presentation** | **Q&A** | **Sub-Total** |
|  | **x 2** | **x 1.5** | **x 1.5** | **/50** |
|  | **x 2** | **x 1.5** | **x 1.5** | **/50** |
|  | **x 2** | **x 1.5** | **x 1.5** | **/50** |
|  | **x 2** | **x 1.5** | **x 1.5** | **/50** |
|  | **x 2** | **x 1.5** | **x 1.5** | **/50** |