Individual Practical Assignment

**Question (10% of total marks)**

Design and develop a mathematics mobile application covering the following three topics:

1. Compare numbers – greater than and less than

* to get children to be familiarised with numeric numbers
* when children are presented with two numbers, they can swiftly identify which number is greater than or less than the other

1. Ordering of numbers – ascending and descending order

* to get children to understand that numbers can be arranged in ascending order or descending order
* when children are presented with a group of (random) numbers they can rearrange them in order accordingly

1. Composing numbers – putting a number together using its parts

* to get children to understand that a number can be made up of smaller numbers (combined together)
* when children are presented with a number, they can put together combinations of (two) smaller numbers that equate to the presented number.

There is no restriction on the choice of development tool and programming language to use for developing the mobile app. However, you are required to produce a simple report (softcopy) that shows screen captures of your game along with its source code. The screen captures should show the flow of your app and cover the three mathematical topics listed above. If you have added any features, or covered additional angles, to make the app better, please remember to also highlight them in the report. You will be asked to demonstrate the game you have developed during your practical class. So please make an effort to work on this individual assignment yourself.

What you minimally need to demonstrate?

1. That the mathematics app covers the three topics listed above.
2. That the user can choose to get to any of the three topics.
3. That there will be different exercises randomly presented to the user under each topic.

The mathematics app should be targeted for school going children. Hence you can limit the numbers to use in the app to be no more than 3 digits, and whole numbers only. And you can assume that the children DO NOT intuitively know anything about mathematical symbols (e.g. +, -, =, etc).

**Marking criteria:**

* Correctness (25%)
* Design (35%)
* User Friendliness (20%)
* Neat Program Documentation (10%)
* Report Format (10%)

[The correctness of the app is mainly based on the requirements stated earlier. Additional features introduced will be assessed under “Design”, and potentially “User Friendliness”.]

## Submission Detail

**Due Date:** 7th April 2025 (Monday)

Rules:

1. Submitted report must use the cover page as provided
2. The deadline for submission is 10 AM on the submission date
3. After 10 AM it is strictly regarded as LATE SUBMISSION
4. The following penalty will be imposed for Late Submission
   1. 20% will be deducted from the allocated marks for this assignment if NOT EXCEED 72 hours
   2. Marks will not be given to those who submit after 72 hours
5. Submit softcopy via Google Form, of which the link will be provided on WBLE days before the submission deadline

[Please submit your individual practical assignment in a zipped file. It should contain:  
1. your report in PDF format.

2. source files, having excluded those listed in .gitignore (e.g. generated using GitHub for Android projects), as placed in its original directory structure.

The above files should be placed in a parent folder named like this:

<Practical Group>-<Name>-<Student ID>.zip (e.g. P1-Lau\_Ding\_Kin-1903405)

And the zipped file should be similarly named, e.g. P1-Lau\_Ding\_Kin-1903405.zip]

**UNIVERSITI TUNKU ABDUL RAHMAN**

**Faculty of Information and Communication Technology**



**UCCD3223 Mobile Applications Development**

**(Feb 2025 Trimester)**

**Individual Practical Assignment**

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| --- | --- |
| **Name** |  |
| **Student ID** |  |
| **Course** |  |
| **Practical Group** |  |
| **Lecturer** |  |

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| --- | --- | --- |
| **Marking scheme** | **Marks** | **Remarks** |
| Correctness | **× 2.5** |  |
| Design | **× 3.5** |  |
| User Friendliness | **× 2** |  |
| Neat Program Documentation |  |  |
| Report Format |  |  |
| **TOTAL** |  |  |