



ASSESSMENT BRIEF

Course: Software Development

Teacher: Fachtna Roe

Component Title & Code: Mobile Technologies 5N0580 (MOBT)

Assessment Technique: Skills Demonstration (#1)

Assessment Title: "Prototype App"

Weighting: 10%

LO's Assessed: LO 4

Issue Date: 2024-01-08

Submission date:

Overview of Brief:

"Create a prototype GUI design for a Health Information App, with demo program. The interface should be easy to use, and attractive. Your GUI should consist of components and sufficient functions to allow feasibility testing/user feedback for the proposed programme".





Assessment activity guidelines/instructions to learners:

Create a working-prototype and GUI design for an App as planning for a Health Information app. The interface should be easy to use, and attractive. Your GUI should consist of components and sufficient functions to allow feasibility testing/user feedback for a commercial programme.

The program need **only** be sufficiently operational to enable testing using volunteers. The program need **not** be completed to release standard; it needs **only** to facilitate "superficial triggering of basic events", as required to present a demonstration of the concept to a potential investor or client.

Screens are:

• BMI input screen to enter basic data, with submit button

No data need be saved to the device or to a back-end; protection against common programming pitfalls should be included. As part of your code ensure data is converted or cast as required for safe calculation.

Platform/design:

You are required to create a semi-functional prototype demonstration using **Android Studio**, following the criteria specified in this brief.

NB: This preview App may use a web-based BMI calculator of your own creation, as the basis for a PWA.

Your demonstration prototype should be good enough to demonstrate to a prospective client how you imagine the final program *might* look.

Produce design sketches/specifications that illustrate the GUI and it's basic operation. Include these as evidence of your design process, and include also evidence of testing.

Your design diagrams <u>may</u> use on-line tools such as from (eg **http://plantuml.com** or **https://www.draw.io/**). Hand drawn sketches and diagrams are acceptable, but must be scanned for submission.





Deliverables:

Submit your report using html, where each file other than the report file links (via hypertext anchor, or in-line for images etc) to all of the other files in the submission. The report file name must be <code>index.html</code> – this is the <code>only</code> file that will be opened directly from the file-system for this assignment by the examiner. You must therefore weave each file into the 'story' of your report.

Include among the linked supporting files:

- 1 screen design sketch
- A screen shot of final design
- A UX work-flow diagram
- UML use-case diagram
- Java code for your MainActivity.java;
 - o put this in your HTML page between <code></code>
- HTML/CSS/JS for your online bmi calculator;
 - o put this in your HTML page between
 <code><</pre></code>
- Evidence of testing.

Submission: Single HTML file (index.html) with all resources (images etc) linked in, in a folder called eg red/1/MOBT1-RED1/ submitted via t.fachtnaroe.net.





More information:

You may inform yourself and learn about the BMI calculation and meaning here (https://www.safefood.net/bmi-calculator) and here (https://www.hse.ie/eng/services/list/2/primarycare/east-coast-diabetes-service/management-of-type-2-diabetes/lifestyle-management/weight-management/).

Marking:

Marks	Criteria
1	 Documented Source Code (0.5 marks each) Algorithm, use case diagrams etc provided Plan provided
3	 Program Functionality (1 mark each) working program appropriate conversions performed data stored/retrieved effectively
5	 Effective UI (1 mark each) appropriate colours, images ease of use screen designs reflect purpose etc navigation effective UX is positive
1	 Software Testing/Debugging (0.5 marks each) evidence of software testing, e.g., documentation of problems/bugs screen captures, visual/digital evidence provided