
DEVELOPMENT SOFTWARE 1

ASSESSMENT 2

Examiner: Dr VR Jugoo

Moderator: Mrs S. Naidoo

Date: 28 May 2025

Time: 2 hours

Instructions: Answer all questions

Total: 50 Marks

INSTRUCTIONS

- Create this project in MIT App Inventor titled: StudentInfoApp
- After each question, take a screenshot and paste them into a Word document.
- Open MS Word. Type your student number on the first line. Thereafter, type the question number and paste the screenshot. Your Word document must be saved as: Student Number.
- At the end of the test, upload your Word document on Blackboard.

QUESTION1

Design an interface with the following elements:

- - TextBox1: For Name input.
- - TextBox2: For ID Number input.
- - Five buttons with the functions described below.
- - Labels to display output for each button.

Answer questions 1.1 to 1.7 below:

QUESTION 1.1

Create Button1 to extract the first three characters of the Name entered in TextBox1 and display the result. Copy and paste your blocks into your word document (5)

QUESTION 1.2

Create Button2 to extract the last two characters of the name. Copy and paste your blocks into your word document. (5)

QUESTION 1.3

Create Button3 to:

- Add all the digits in the ID from TextBox2.
- Display the sum

Copy and paste your blocks into your word document. (10)

QUESTION1. 4

Create Button4 to:

- Use the 7th to 10th digits of the ID number to determine gender.
- If the number is 5000 or more, the person is male.
- If it's less than 5000, the person is female.
- Display the gender in a label.

Copy and paste your blocks into your word document. (10)

QUESTION1.5

Create Button5 to:

- Use the first 2 digits of the ID number to get the year of birth.
- Assume birth years from 00–25 are in the 2000s and 26–99 are in the 1900s.
- Calculate and display the person's age in years based on the current year.

Copy and paste your blocks into your word document. (10)

QUESTION 1.6

Research and apply three UI design principles to your App interface. Then answer the following in your Word document:

- List and explain the three principles you applied.
- Why is a good UI important in mobile app development?

Copy and paste your user interface into your word document. (5)

QUESTION 1.7

Answer this question in your Word document, reflect on your experience: (5)

- What did you struggle with in this test?
- Why did you struggle?
- How can you overcome these challenges in the future?
- What did you learn about using MIT App Inventor as a tool for problem-solving?