

## **HIGHER EDUCATION PROGRAMMES**

Academic Year 2025: January - June

Formative Assessment 1: Systems Development Project

Management (HSPM300-1)

NQF Level, Credits: 6, 15

Weighting: 40%

Assessment Type: Essay Questions

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Examiner: S. Tshumani

Due Date: 27 March 2025

Total: 100 Marks

## Instructions:

- This paper consists of FIVE (5) questions.
- It is based on chapters 1 7 of your textbook.
- All questions are compulsory. A Copyleaks Report will be issued via ColCampus once the assignment is submitted. Please ensure that you follow the correct steps when uploading your assignment to ensure that the Copyleaks Report is correctly issued. If the incorrect document is uploaded or no Copyleaks Report is issued, a mark of zero (0) will be awarded. If the Copyleaks Report indicates that a 30% similarity/plagiarism score has been exceeded, 25% of the assessment total will be deducted from the final grade.

## Case Study: "Harmony Health" - A Software Development Success Story

## Background

**Harmony Health** is a mid-sized healthcare provider that delivers personalised health management solutions to patients with chronic illnesses. With the rise of telemedicine and remote patient monitoring, Harmony Health saw an opportunity to create a mobile application allowing patients to track their health metrics, communicate with their healthcare providers, and receive personalised health advice.

To turn this vision into reality, Harmony Health partnered with **BrightCode Solutions**, a software development firm known for its innovative approach to digital healthcare solutions.

Question 1 [30 marks]

Read the above case study and develop a project charter for **BrightCode Solutions** to help them prepare for the Harmony Health project.

Question 2 [20 marks]

Analyse the conflicts that might delay the start of the Harmony Health project.

Question 3 [12 Marks]

Initially, **BrightCode Solutions** considered using the Waterfall methodology due to the project's complex requirements and need for extensive documentation. However, after analysing the potential changes in healthcare regulations and the need for iterative feedback, they adopted the **Agile methodology**.

List and discuss the challenges BrightCode Solutions would likely encounter if they used the waterfall methodology.

Question 4 [28 marks]

While developing the Harmony Care mobile application, **BrightCode Solutions** must decide whether to build a custom-made health metrics tracking module from scratch or integrate an existing off-the-shelf software solution that offers similar functionality.

- 4.1 As the project manager, convince the BrightCode solution team to use custommade software by providing common challenges with off-the-shelf software. (8 marks)
- 4.2 Mention and describe the roles of eight (8) key business stakeholders that will be needed in this software development project. (16 marks)
- 4.3 Identify the usual internal and external roles in a software development project.

(4 marks)

Question 5 [10 marks]

As the project manager of the Harmony Health mobile application, you must ensure that the organisation adopts a budgetary technique that complements the project's aim and its total method. Based on the project characteristics and the need to engage stakeholders, which budgeting methods could be considered efficient for this software development project?

Explain your reasoning indicating how the selected approach will fit the needs of the Harmony Health project and the possible drawbacks of this decision.