DURBAN UNIVERSITY OF TECHNOLOGY
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Department: Information Technology

Bachelor of Information and Communications Technology (BINCT1) & Advanced Diploma in Information and Communications Technology (ADICT1)

Due Date – Refer to the Learner Study Guide
Marks - Refer to the Assessment Rubric

Project 1 – Documentation Requirements

The project documentation serves as a crucial component in the development of software or applications, offering an in-depth overview of the project's design, architecture, functionalities, and how it is to be utilized. Its primary goal is to furnish developers, stakeholders, and users with a comprehensive understanding of the software project and its various elements. Essential aspects that must be included in the documentation for your web-based application project are as follows:

A. Introduction

The introductory section of the documentation should offer a clear and concise overview of the project, its objectives, and its significance. Begin with a succinct summary that captures the essence of the project, highlighting the problem it addresses and its relevance. Explain the project's aims and the innovative solution it proposes, ensuring to articulate the value and impact it brings to its intended audience.

B. Development Methodology

In this section, detail the specific software development methodology adopted for the project, whether it's Agile, Waterfall, DevOps, or another model. Describe the rationale behind choosing this model and how it aligns with the project goals and team dynamics.

C. Application Architecture and Design

Provide a comprehensive overview of the application's architecture, elaborating on the key components, their interactions, and structural organization. Utilize diagrams, such as Unified Modeling Language (UML) or Object Constraint Language (OCL) representations, to visually convey the architecture, making it accessible to both technical and non-technical stakeholders. This section should serve as a roadmap, clarifying how the web application is constructed and operates at a high level.

D. Application Scenario and User Scenarios

This section should discuss the application's features and capabilities, providing a clear explanation of features and APIs consumed to solve the problem. Incorporate scenarios to illustrate typical user interactions and the application's behavior in various contexts. This approach not only informs about what the application does but also demonstrates how it benefits its users, addressing their needs and solving specific problems. Include visual aids such as screenshots to enrich the descriptions and make the functionalities more relatable and understandable.

E. Testing and Deployment

This section should detail the testing strategies employed to ensure the application's quality, reliability, and security. Describe the types of testing conducted (e.g., unit, integration, system, user acceptance testing), provide screenshots as evidence and the screenshots as evidence. For deployment, outline the process from finalizing the application for release to the web. Include information on the deployment environments, continuous integration and deployment (CI/CD) pipelines if applicable, and screenshots to illustrate deployment successes or key stages.

F. Conclusion

Conclude the documentation by summarizing the key points covered, reinforcing the project's contributions and its significance. Offer reflections on the lessons learned and potential areas for future development or research. Lastly, include a comprehensive list of references, citing all sources, tools, libraries, and frameworks utilized throughout the project.