

Scope and objectives

These guidelines detail the technical documentation that should be produced during the software development lifecycle and are applicable to all government institutions in Rwanda.

The main objectives of having comprehensive technical software documentation are:

- **Facilitates common understanding:** Documentation provides comprehensive information about the software's functionality, design & architecture, maintenance and usage. It helps different stakeholders such as users, business analysts, developers, testers, users, support team and other stakeholders to have a common understanding of the requirements and features of the software and how to use and maintain it effectively.
- **Supports development:** Technical documentation serves as a guide for developers during the software development process. It helps them understand the user requirements, design decisions, coding standards, and implementation details which are crucial for maintaining consistency and quality across the codebase.
- **Aids maintenance and updates:** As software evolves over time, documentation helps maintenance teams to understand existing features, code structure and configurations. It facilitates troubleshooting, bug fixing and adding new features by providing information on the software's design.
- **Enhances collaboration:** Documentation serves as a common reference point for team members working on different aspects of the software. It promotes collaboration by ensuring that everyone is on the same page regarding requirements, design, implementation details and overall progress.
- **Onboarding new team members:** Technical documentation is invaluable for onboarding new team members. It provides them with the necessary background information and resources to quickly get up to speed with the project and start contributing effectively.
- **Supports user training and adoption:** For end-users, documentation helps them learn how to use the software efficiently. Clear and concise user manuals, tutorials, and guides empower users to leverage the software's features effectively, leading to better adoption and satisfaction.
- **Reduces support burden:** Well-documented software reduces the need for extensive customer support by enabling users to troubleshoot issues independently. Detailed troubleshooting guides and FAQs can address common problems, reducing the burden on support teams.
- **Ensures compliance and accountability:** Documentation plays a crucial role in providing evidence of compliance with policies, regulations and standards during the implementation and maintenance of software. This can include software development standards, data privacy law and policies, security policies as well as other policies and standards.