Formats For Writing Requirements: A Comparative Analysis

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It is very crucial to articulate requirements in software development and project managements. There are plethora of formats for writing requirements likes: Business Requirements Document (BRD), Functional Requirements Document (FRD), System Requirements Specification (SRS), User Stories, Use case etc. The two prominent formats elucidated in this document for writing requirements are User Stories and Use Cases. There is a detailed study of both their structures, differences and applications to identify which format is suitable for the project.

User Stories

User stories are based on end-user's perspective. It is an informal description of the features, which follows a simple template of [type of user] with [a function] that provides [a value]. For example, "As a registered user, I would like to have a reset option for my password which will gain me back the access to the account when I forget it." According to Cohn (2004), user stories emphasize the user's needs and the value they derive from a feature. They are particularly popular in Agile methodologies due to their simplicity and focus on end-user value.

Use Cases:

Use cases provide a detailed description of how a user interacts with a system in order to achieve a specific goal. The template includes detailed information like user role, pre-conditions, flow of event, alternative flow, post-conditions. Cockburn (2000) explains that use cases offer a structured approach to capturing functional requirements, often including step-by-step interactions between the user and the system.

Comparison And Differences:

User Stories has a high-level description that concentrates on user value, whereas use cases have more details that includes specific interaction with the system and its response. In terms of formality, user stories are more informal like every day language, but user Cases more formal and follows standard structure. User stories covers a single functionality and User Cases covers up multiple functionality or features. User Stories are used in the early stage and throughout the agile cycle but use cases are often used in a traditional and plan-driven methodology. There is an emphasize in the end-user perspective and business value in user stories but use cases focuses on system interactions which is useful for developers and testers.

Choice Of Format

I choose user story format for this analysis because it is easier to write and understand. It also provides a clear communication among diverse stakeholders (Cohn 2004). They are very flexible in adapting to new requirements and align well with agile development practices (Lucassen et al., 2016). It also inherently focuses on user needs and values, ensuring that development efforts align with user expectations (Wautelet et al., 2014). They support incremental development and frequent feedback, which is crucial in today's fast-paced software development environment. While use cases have their merits, especially in complex systems or highly regulated environments, user stories offer a more adaptable and user-focused approach that aligns well with contemporary software development practices.

References

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