

SE UNIT 01 ASSIGNMENT QUES 02

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Subject: Software Engineering

Branch: BE CSE (4th Semester)

QUESTION:

A company is looking to develop a new proprietary software application that can compete amongst current social media platforms. As Chief Analyst, give an outline of the different stages of requirements engineering.

ANSWER –

If a company is looking to develop a new proprietary software application that can compete amongst current social media platforms. As Chief Analyst, I have to give outline of the different stages of requirements engineering.

These STEPS are given below -

Step 1: Gather & Develop Requirements

The first step is to gather, analyze and develop requirements from the Concept of Operations (CONOPS), stakeholder needs, objectives, and other external requirements. Once requirements are documented, they are prioritized, de-conflicted, and validated with the stakeholders.

Step 2: Write and Document Requirements

The second step focuses on writing down the functional and performance requirements into the appropriate requirements documents; Initial Capabilities Document (ICD), Capability Development Document (CDD), Capability Production Document (CPD), System Requirements Document (SRD).

Requirements must be documented in order to establish a requirements baseline to start building a system and manage any changes. Requirements can be developed using the Capability Development Tracking and Manager (CDTM) tool for DoD programs.

Step 3: Check Completeness

The third step is to check that a complete set of requirements have been developed and documented that defines all system functions that are needed to satisfy the stakeholder needs with their associated performance, environmental, and other non-functional requirements. Requirement Tracing is a big tool in this step.

Step 4: Analyze, Refine, and Decompose Requirements

Requirements Analysis is the first major step in the Systems Engineering Process. This step examines each requirement to see if it meets the characteristics of a good requirement. Each requirement is then decomposed into a more refined set of requirements that are allocated to sub-systems and documented in the Weapons System Specification (WSS). Newly derived requirements are expected to emerge from this process, which continues until all requirements are defined and analyzed.

Step 5: Verify and Validate Requirements

In step five each requirement must be verified and validated to ensure that these are the correct requirements. This ensures that the requirements meet the overall objective of the system and all stakeholder needs.

Step 6: Manage Requirements

In step six the requirements have been accepted and a baseline is established by the stakeholders. Any changes to the requirements are controlled using a Configuration Management process.

So If a company is looking to develop a new proprietary software application that can compete amongst current social media platforms. As Chief Analyst, I will give outline of the different stages of requirements engineering as I mentioned above.