1ICPC317

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SDLC Laboratory

Quality Laboratory Manual

Experiment No. 03

To perform system analysis: Requirement analysis, SRS

Course Instructor –
Mr. Sharanabasava Raddi
ASSISTANT PROFESSOR

Experiment No. 03

Title of Experiment: To perform system analysis: Requirement analysis, SRS

Aim of Experiment: To analyze the system through Requirement analysis process and SRS.
System Requirements – Win 10 and above OS, 4GB RAM, 2.33 GHz Processor

Software/s Requirement –

Experiment Objectives:

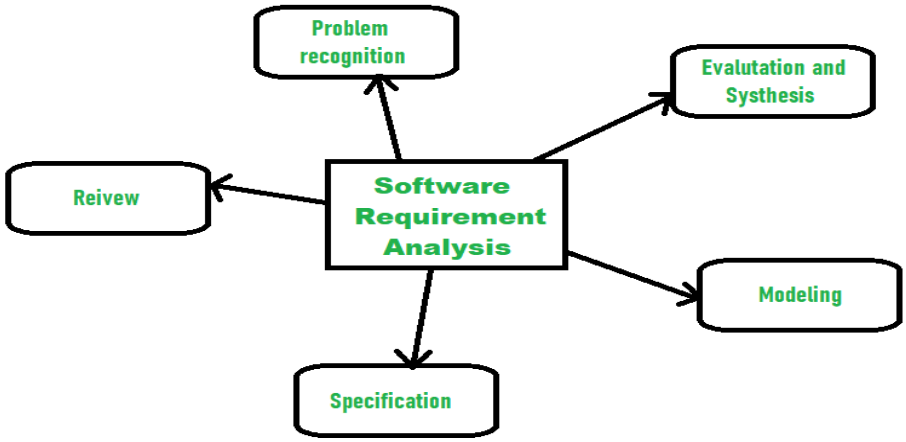
- To understand the requirement analysis phases.
- To analyze the system by applying requirement analysis process.
- To understand the SRS that helps to analyze the system.

Experiment Outcomes:

- Understanding of the requirement analysis tasks.
- Applying requirement analysis tasks to analyze the system.
- Understand the SRS as a part of system analysis.

Theory:
System Analysis: It is the very first step in any system development and the critical phase where developers come together to understand the problem, needs, and objectives of the project.

Requirements analysis: Process used to determine the needs and expectations of a new product. It involves frequent communication with the stakeholders and end-users of the product to define expectations, resolve conflicts, and document all the key requirements.



1. **Problem Recognition:** Problem recognition is the first step in identifying a need or problem that needs to be solved. It's a vital step in the decision-making process, whether it's for consumers or for people in general.

2. **Evaluation and Synthesis:** Synthesis is the process of combining information to create new insights, while evaluation is the process of judging the value of that information.
3. **Modeling:** The process of creating abstract representations of software. It's a key part of the software development process.
4. **The software requirement specification (SRS):** which means to specify the requirement whether it is functional or non-functional should be developed
5. **Review:** After developing the SRS, it must be reviewed to check whether it can be improved or not, and must be refined to make it better and increase the quality.

Observations:

- System can be analyzed with the help of requirement analysis process.
- Requirement analysis has defined tasks to be carried out that is the heart of system analysis.
- Helps to understand the system clearly and leads to develop and produce quality system.

Conclusion:
The experiment successfully demonstrated, how to apply the requirement analysis process to analyze the system and define the SRS (Functional and Non-functional requirements).

Expected Oral Questions:

1. Define system analysis?
2. What is the key role of System analysis in software engineering?
3. What requirement analysis?
4. Mention the different steps involved in Requirement analysis?
5. What is SRS?

FAQs in Interview:

1. How system analysis leads to produce quality software?
2. Mention possible problems to be faced if we don’t apply system analysis?
3. What is modeling?
4. What is review?