

# **SOFTWARE ENGINEERING ASSIGNMENT 2**

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## **Comparison between various SRS formats**

Different companies use different SRS formats according to their need.

This document provides a comparative analysis between SRS IEEE standard and SRS formats used by various companies.

### **IBM vs IEEE**

- IBM SRS is much more concise in comparison to the IEEE format.
- IEEE provides a separate section for system features whereas IBM format doesn't give much emphasis on the system features.
- IBM SRS gives more importance to pictorial representations and use case diagrams, Web architecture diagrams, ER diagrams, and data dictionaries. IEEE also makes use of Use Case and ER diagrams but other diagrams are not compulsory.
- IBM SRS has an architecture diagram which is a graphical representation of the concepts, their principles, elements and components that are part of the architecture. This gives an overall picture of the project.
- Definitions, Acronyms and Abbreviations are provided in the starting in the case of IBM Standard format whereas they are listed towards the end in the Appendix in IEEE format.
- IEEE format allots a major space to functional and non-functional requirements whereas IBM SRS allots a small portion under the heading 'Supplementary Requirements' to include the requirements, this makes the SRS concise and allows the user to give importance on only certain necessary requirements, the developer need not worry about unnecessary requirements like business rules in the requirement stage.

### **Infosys vs IEEE**

- Infosys' SRS is quite detailed in comparison to IEEE format.
- Certain events like business events, external events and temporal events are to be specified in Infosys' SRS. Also, the inputs and outputs and relations between the inputs and outputs for each business event are specified.
- A separate section called 'Prototype' is provided in the Infosys SRS format. IEEE Std format lacks such a section.
- In the first section 'Overview' a brief description of the current system and limitations of the current system are specified followed by an overview of the proposed system and objectives of the proposed system. The IEEE format lacks the information about the current system.

### **Tech Mahindra vs IEEE**

- The Tech Mahindra SRS doesn't provide a separate section for non-functional requirements. It mainly gives emphasis on the product and doesn't describe the users of the product and use class characteristics.

## **Belitsoft vs IEEE**

- The BelitSoft SRS includes certain extra sections like Limitations, Apportioning of Requirements and Verification.

## **Drawbacks of IEEE SRS**

An accurate SRS has to be complete. But on the contrary a complete SRS that contains more information than actually needed, is not accurate. Nevertheless, accurate, complete and consistent SRS are still a challenge in practice.

Some drawbacks of the IEEE SRS are:

- Less importance is given to pictorial representations like Use case diagrams, Web architecture diagrams, ER diagrams, and data dictionaries. The IEEE SRS is more theoretical and there are higher chances of missing something out in theory than in pictorial representations.
- IEEE SRS lacks information about the current system.
- IEEE SRS does not contain events like business events, external events and temporal events.