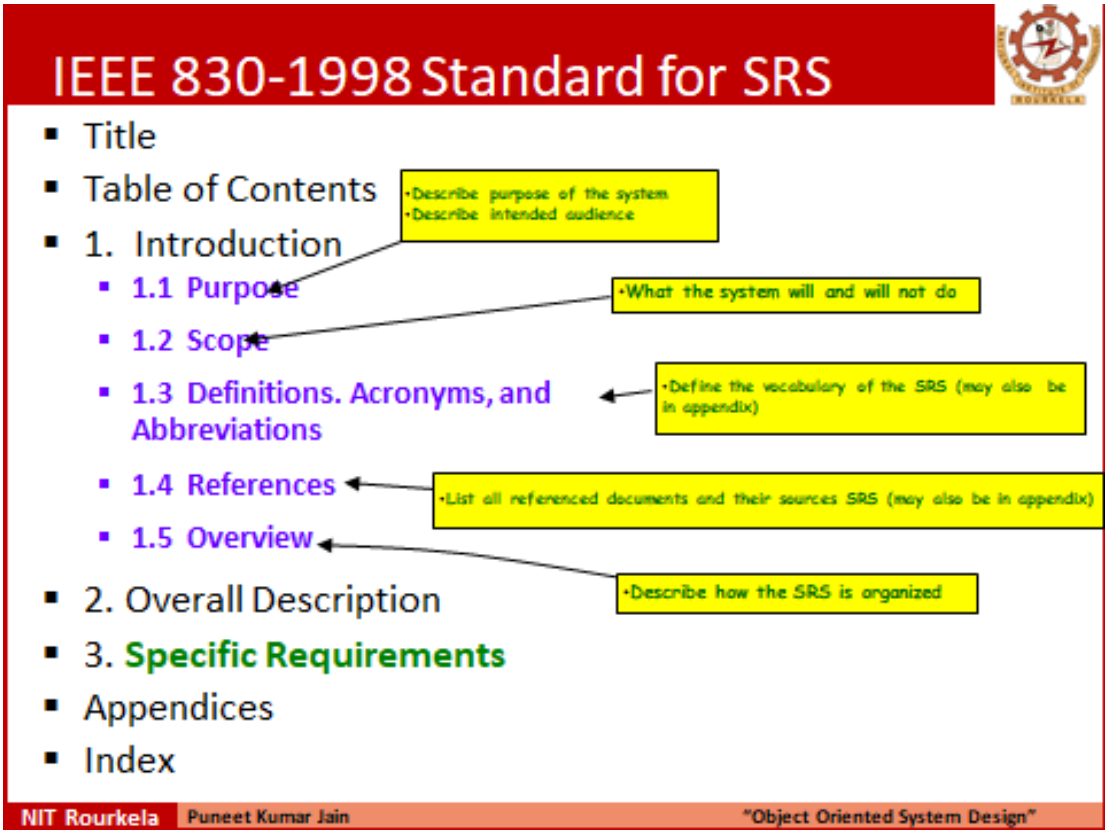
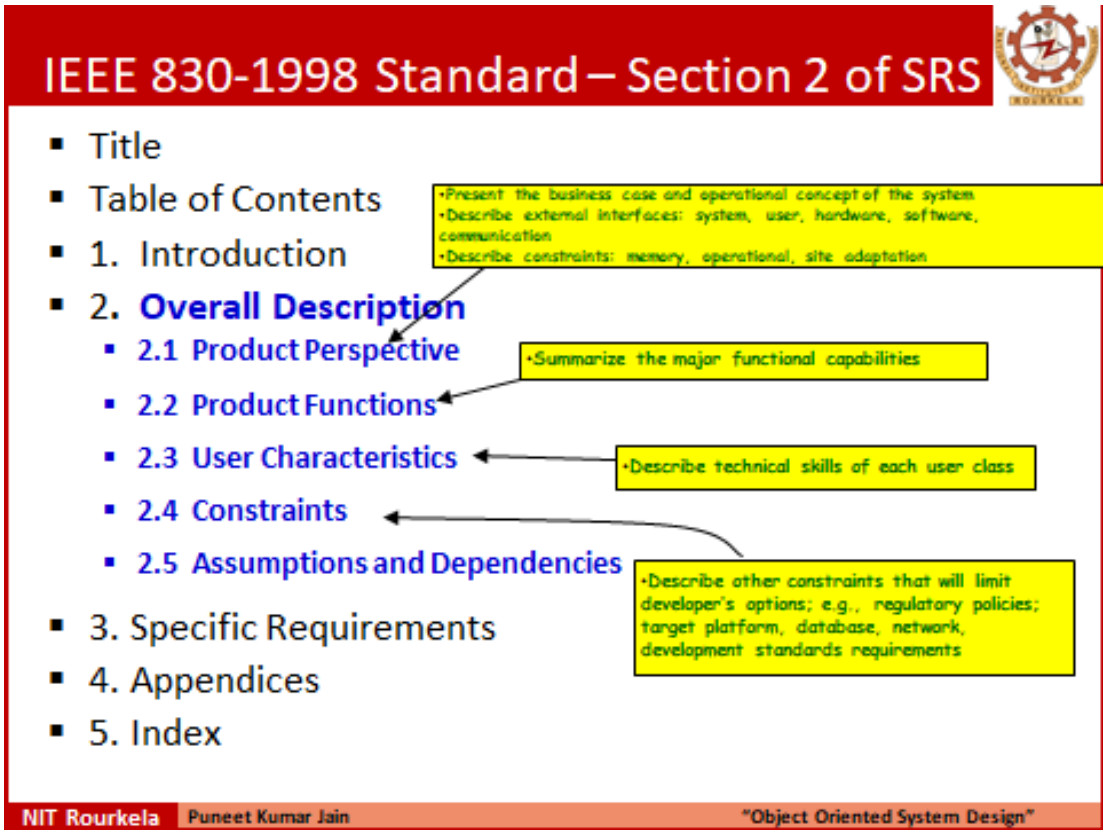
Software Engineering Lab (CS3074) SPRING 2020

Lab Sheet-5: Software Requirement Specification (SRS)





IEEE 830-1998 Standard – Section 3 of SRS (1)

- ...
- 1. Introduction
- 2. Overall Description
- 3. Specific Requiremen
  - 3.1 External Interfaces
  - 3.2 Functions
  - 3.3 Performance Require
  - 3.4 Logical Database Req
  - 3.5 Design Constraints
  - 3.6 Software System Quality Attributes
  - 3.7 Object Oriented Models
- 4. Appendices
- 5. Index

Specify software requirements in sufficient detail so that designers can design the system and testers can verify whether requirements met.

State requirements that are externally perceivable by users, operators, or externally connected systems

Requirements should include, at the least, a description of every input (stimulus) into the system, every output (response) from the system, and all functions performed by the system in response to an input

Prepare the SRS document (in IEEE830 format) for each of the following problems.
You should identify the appropriate requirements for each problem Draw the Use Case diagrams and Class Diagrams. Develop the corresponding software with an interactive GUI.

Case study 1:

AUTOMATED BANKING SYSTEM

PROBLEM DEFENITION

To develop an automated banking system, which is required to perform the following functions:
1.1 The customer logs into the system using card number and pin number. The system checks for validation.
1.2 The system queries the customer for the type of account either fixed deposit or credit account. After getting the type of account the system shows the balance left.
1.3 The system queries the customer for the transaction type either withdrawal or deposit and the required amount. The user enters the amount and the transaction if carries out

Case study 2:

LIBRARY MANAGEMENT SYSTEM

PROBLEM DEFENITION

The library management system is software, which automates the job of a librarian.
1.1 The user can inquire about the availability of a book in which he can search by entering the author's name or by entering the title of the book.
1.2 The user can borrow a book. He must provide the username and the card number, which is unique and confidential to each user. By confirming the authenticity of a user, the library management system provides information about the number of books already borrowed by the user and by referring to the database whether the user can borrow books or not. The library management system allows the user to enter the title and the author of the book and hence issues the book if it is available.
1.3 By entering the user details and the book details the user can return the borrowed book.