

3. Library management system :

* Problem statement :

Library management system aims to develop a software that effectively manages the various aspects of operations such as searching, lending of books and purchasing of books.

* SRS:

1. Introduction:

- clearly document and define the functional and non functional requirements by ensuring effective library management.
- Development time depends on how complex the software that is being developed is.
- SRS contains general description, functional and non functional requirements, interface and performance requirements and design constraints.

2. General Description

Help library employees easily manage and handle library operations and provide good customer support.
Features: Searching, lending and purchasing and updating catalogue. User community includes customers, library staff, IT professionals.

3. Functional requirements:

- Making sure that the search mechanism is easy.
- Security
- Integrating with other systems and services.

4. Interface requirements:

- Make the user interface much easier to interact with, and to ensure that customers can access pricing information.
- Payment process must be fast and secure.

5. Performance requirements:

- Time: User requests must be accomplished in a timely manner;
- Amount of database: depends on the size of the database; exact memory requirements is determined based on needs and requirements.
- Scalability: should be able to handle more traffic during peak periods without slowing down.
- Security: should keep the information about customers safe and secure.

Design Constraints:

6.

- cannot take multiple years to develop and implement.
- software has to integrate within the already existing infrastructure.
- Must adhere to the security regulations

7.

non functional attributes:

- Portability: Has to work on different platforms like laptops, mobile phones etc.
- Security: ensure that data does not get leaked and fall into the wrong hands.
- scalability: Needs to handle growth and increased demand.

8. Preliminary Schedule and Budget:

- Planning: 15 days
- Development: 3 months
- Testing: 1 month
- Hardware: \$10,000 - \$20,000
- Training: \$45,000
- Personnel: \$15,000