Software Requirement Specification

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Abstract. This is a Software Requirement Specification document for the purpose of the website development for the Literature Society, IIT Jodhpur.

1. Motivation

The Literature Society, IIT Jodhpur is a society of literary enthusiasts who like to engage in activities like poetry sessions, book reading sessions etc. A dedicated website for the society will make the functioning much more easy and elegant. Poetries by students, a wide variety of books, important announcements etc can all be conveyed extremely easily through a website as opposed to the current methods like e-mails, social media etc.

2. Our plan

We have already established that a dedicated website for the Literature Society is a need of the hour. Our plan is to develop a website that is curated to the needs of the Literature Society. Currently all the correspondence takes place through e-mails and social media posts which often get missed if not checked regularly. A website would make things easier as all the relevant announcements would appear on the home page itself, thus enabling people to stay updated simply by opening the website. Additionally, it is really hard for new members to get a hang of the workings of the society and as a result, they feel lost. With a website in place, introduction to the society would be easy as well as formal. The interested person would simply have to visit the website and check out the archives where one can find information about past events, competitions and contestant's submissions (poetries, prose etc.) from those competitions. This way one would be able to familiarize oneself with the Literature Society.

3. Primary Software Standards

The website will have the standard functionalities of any other decent website, such as usability, reliability, security being some of the major ones.

3.1. Usability

One of the most important feature of a website is its usability. The main aspects that need to be taken care of under usability are:

Learnability: The website will be designed in such a way that the user can easily navigate through the website and find what one is looking for.

Aesthetics: Although functionalities hold utmost importance for a website, its aesthetics are important too. Therefore, we will make sure that while ensuring proper functionalities, the aesthetics of the website are not compromised.

Accessibility: We will make sure that our website is easily accessible to users with maximum functionalities.

3.2. Security

As we are incorporating the Sign-In feature, therefore, security becomes one of the most important standard for the website. We understand that the users will trust us with their data (in context of this website, with their poetry, prose works etc) and breaking their trust is not an option. Following parameters will be taken care of:

Confidentiality: As we are collecting people's data, therefore, we duly understand that it is our job to make sure that their data remains protected and confidential.

Integrity: The sign-in feature will be security measure to ensure that only the authorized user is accessing an account by making sure that the password entered is correct.

Authenticity: The user will be able to login to the system through valid credentials, thus ensuring the authenticity of the website.

4. High Level Design (HLD)

We have included the primary user stories and a user flow in our High Level Design.

4.1. User Stories

Following are the primary user stories:

- · As an end-user view the content on the website.
- As an end-user start a discussion in the discussion forum, either in an existing thread or start a new one.
- As an end-user issue a book of one's choice from the book issue portal on the website.
- As an end-user take the "Literary quiz" available on the website and receive a score
- As an end-user generate a request to upload one's works on the website after signing in.
- · As an end-user access the soft version of books in the "Virtual Library".
- As an end-user generate a request to upload PDF of a book on the website after signing in.
- As an admin post announcements and regular updates on the website.
- As an admin verify the upload requests and choose what to display on the website.
- As an admin verify the upload requests for books and add the authentic ones in the "Virtual Library".

4.2. User Flow

The following user flow is the very first user flow for our website and is subject to change as the website goes further into development. In this user flow, we have included the standard functionalities of our website. We might end up adding more functionalities as we go ahead with the development work.

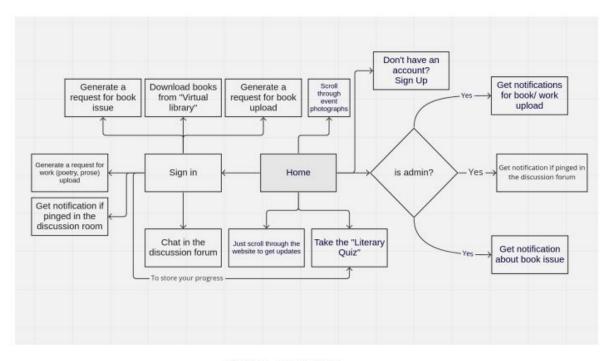


Figura 1. User Flow

5. Low Level Design (LLD)

The low level design includes the data structures, algoritms and functions used to implement the features of the proposed website.

- Home Page: The home page will be one of the most aesthetic parts of the website. It will redirect the user to various features such as secure sign-in/sign-up, "The Literary Quiz", archives of past events of the society.
- Authentication: The authentication module will ensure the "Security" of the website as the user can safely login to his account.
- Upload Module: One of the key features of our website is its "Upload"feature. The user can upload books and his works onto the portal. This module will transfer the uploads to the admin's inbox for authentication of the upload.
- Discussion module: This module will keep record of the discussions conducted by various users. To ensure the authenticity of the discussion forum, this module will require a login from the user before he can chat in the discussion room.
- Book Issue module: Another key feature of the website is the "Online book issue system". The user will be able to generate a request for issuing a book. This module will cause that request to reflect onto the admin's side, so that the admin can approve the book issue. This module will also keep a record of the issued books.
- Archives: This module will contain the photographs of past events conducted by the Literature society.

6. Modelling

The model that we will use is the Series Iterative Model. We chose the Iterative model because if we end up facing some errors in the testing phase, the iterative model will allow us to start afresh with a new iteration. Now as for the Series part, we chose to have a series iterative model primarily due to small team size (just two people).