Software Requirements Specification for 'Links'

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1 Introduction

This document provides the Software Requirement Specifications of the project. This document provides the details on the functional and non functional aspects of the project.

1.1 Document Purpose

The document describes the software requirements of "Links", version 1.0. The software requirements encapsulate the whole of the product.

1.2 Problem Background

Duplication of effort amongst teams implementing OS functionality simulation modules.

1.3 Product Scope

"Links" is website offering bookmarking services with the specific requirements of being that it should be deployable on a private server within an organization.

The purpose is to enable an people in the organization to share bookmarks with each other.

The specific benefit delivered by "Links" is that sharing/publishing of bookmarks can be controlled at the required level of granularity.

2 Overall description

This section provides the provides the overall description of the project. This includes the product perspective and the functionality.

2.1 Product Perspective

A bookmarking service is a centralized online service which enables users to add, annotate, edit and share bookmarks of web documents, the most popular being Delicious. "Scuttle" is one of the other known open source alternative. "Links" is envisioned on similar lines with and specific objective that it is aimed at deployment within an organization.

2.2 Product Functionality

1. Provide for user accounts/signup.

2. Provide for website bookmark management.

3. Provide for creation of user groups for sharing bookmarks and their management

4. Provide for options to share website bookmarks amongst users and groups.

5. Provide options to push website bookmarks onto popular social media and via email.

3 Specific Requirements

This section provides the specific requirements of the project. This describes the functional aspects of the project.

3.1 Functional Requirements

The functional requirements of the project are given in detail below.

1. Login

   - User logs in into the system.
   - *Input:* User enters the login details and clicks on login.
   - *Output:*
     - If the validation of the user credentials is successful:
       * The user is redirected to the Homepage.
     - If the validation of the login details is unsuccessful:
       * An appropriate error message is shown to the user.

2. Signup

   - User clicks on Signup.
   - *Input:* Signup details are asked.
   - *Output:*
     - If validation of the details is successful:
       * Account is created.
     - If validation of the details is unsuccessful:
       * An appropriate error message is shown to the user.

3. Save Links

   - User bookmarks the links.
   - *Input:* A Title, URI, Tags and Annotations are provided.
   - *Output:*
     - After the link is saved:

* Acknowledgement for the action is provided.

4. Edit Links

   - User edits the links.
   - *Input:* An existing link, modified data (title, tags, annotations).
   - *Output:*
     - After the link is updated:
       * Acknowledgement for the update is provided.

5. Delete Links

   - User deletes the links.
   - *Input:* An existing link shared by the user.
   - *Output:*
     - After the link is deleted:
       * Acknowledgement for the deletion is provided.

6. Create User Groups

   - Creation of Groups by the user.
   - *Input:* Group name and group description corresponding to the group.
   - *Output:*
     - If the group name is not already used:
       * Acknowledgement for the creation is provided.
     - If the group name already exists:
       * Appropriate error message.

7. Join Group

   - User joins the group.
   - *Input:* Group name of the group that the user wishes to subscribe to.
   - *Output:* Acknowledgement of the subscription is provided.

8. Unjoin Group

   - User unjoins the group.
   - *Input:* Group name of the group that the user wishes to unsubscribe to.
   - *Output:* Acknowledgement of the un-subscription is provided.

9. Share

   - Sharing of the links.

- *Input:* A set of bookmarks to be shared via email or popular social media
- *Output:* Share bookmarks via the specified media.

10. Add Members

    - Add members to the group.
    - *Input:* User names by the group owner.
    - *Output:* Acknowledgement of addition to group.

11. Add Members

    - Remove members to the group.
    - *Input:* User names by the group owner.
    - *Output:* Acknowledgement of deletion to group.

4 Non-functional Requirements

This section provides the non-functional aspects of the project.

4.1 Performance Requirements

1. Any interactive transaction with "Links" should not take more than 5 seconds

4.2 Safety and Security Requirements

1. All users must be authenticated before being given modification privileges to "Links".

4.3 Software Quality Attributes

1. Interoperability

   - Expose APIs through which the following can be done
     - Search based on bookmarks, annotations, tags in accordance to the visibility of the user.
     - Add, delete and edit the bookmarks in accordance to the visibility of the user.

   As a proof of concept an android application that consumes the data from the provided APIs will be created

2. Suggestions

   - Suggest tags if same link was shared by others based on the visibility level of the user.