Buzzword Software Solutions

Buzzworthy Resource Locator (BRL) Vision Document

1 Introduction

1.1 Background

Within large organizations, it is important for software developers to have quick and ready access to a variety of development resources relevant to specific business needs and processes.

1.2 Purpose

The purpose of this document is to outline the vision for a proposed software solution to create a dynamic library of online software development resources that can be shared across an organization.

1.3 Overview

This document details how the proposed software solution will add value to the company, both as an internal productivity tool and a marketable product which could be licensed and sold for external use. This document also outlines the project’s scope, requirements, use cases, and features.

2 Positioning

2.1 Problem Statement

There is a vast sea of information on the internet, so much so that users may find it difficult to look for resources that are relevant to their work. Specifically, Buzzword employees lack a method for sharing valid and safe resources between colleagues and other organization members.

2.2 Alternative Solutions

Existing solutions include collaborative spreadsheets and documents that lack user authorization and are vulnerable to unintended changes and deletion. Static resource directories (e.g. a shared pdf containing hyperlinks) prevent collaborative resource pooling and real-time updates.

2.3 Vision Statement

The Buzzworthy Resource Locator is a tool specifically designed for the exchange of reliable information in a safe and trusted web service. Employees will have access to recommended URLs tailored to their needs; those with a higher authorization level are able to add, edit, and delete resources they may deem useful or redundant.

2.4 Marketing and Business Opportunity

This program was designed for use within Buzzword Software Solutions, though a fast and reliable resource locator holds tremendous value for businesses across industries. Contingent on internal success, the Buzzword Resource Locator may be marketed to other companies. Our teams will monitor web traffic and website engagement throughout deployment to develop a comprehensive marketing plan that will further boost product usage.

3 Project Scope and Constraints

3.1 Scope of Initial Release

For the initial release of this software, users with varying levels of permissions will be able to create, edit, and delete library records via a REST API connected to a database. There will also be search functionality by document category and the ability to add comments to records. The program will log history of record edits and deletions. User pre-authentication through Single Sign-On (SSO) will be performed outside of the scope of this software and passed into the API as a security token.

3.2 Scope of Upcoming Releases

In future releases, core functionality will be extended to add support for a tag system to allow each resource to be simultaneously categorized and searchable under multiple topic tags rather than a single category. Users will have the ability to edit their comments.

3.3 System Constraints

This software does not contain any capabilities for URL content checking; case-by-case assessment of URLs will be at the discretion of managers. Additionally, access to the system is dependent upon the authorization server running to authenticate users.

4 User/Stakeholder Descriptions

4.1 User Roles

|  |  |  |
| --- | --- | --- |
| Company Role | System Role | Description |
| Manager | Admin | All managers can add, edit, and delete all records and add or delete comments (and edit their own). |
| Developer | Contributor | Developers can add records/comments and can only edit or delete records/comments that they added. |
| Other Employee | Commenter | Other Employees can only add comments and edit or delete comments that they added. |

4.2 Stakeholder Profiles

|  |  |
| --- | --- |
| Stakeholder | Responsibilities |
| Managers | Routinely maintaining library to ensure quality of resources fulfill company needs (e.g. removing outdated or duplicate records) |
| Developers | Adding and accessing resources to make development more efficient company-wide |
| Other Employees | Reviewing development resources as needed to better understand the software development lifecycle |
| Database Administrator | Configuring software and connecting it to the library database |
| Tech Support | Assisting employees with operating the software |
| Legal Department | Ensuring that the project meets all relevant secure data handling standards |

5 Product Features

5.1 Records Management

5.1.1 Add Record

As the BRL will be empty upon first use within the company, the primary feature of adding records is a top priority. Only Managers and Developers have the authority to add records to the BRL; this allows for a consistent and reliable stream of content to be inserted at a time.

5.1.2 Delete Record

Compared to adding records, there is a slight change in authority about who can delete them. When deleting, developers can only delete a record that they themselves have added while managers can delete any records as they deem fit.

5.1.3 Edit Record

In terms of editing a record, the only information that is being modified would include: description, and URL. Similar to deletion, Managers can edit any record, and developers can only edit their own. This feature would be made available in an upcoming release.

5.2 Comments Management

5.2.1 Add Comment

All users can comment on records. With comments, users can have discussions or just mention details they found interesting or helpful for others to view.

5.2.2 Delete Comment

All users can delete their own comments, while managers may delete any comment.

5.2.3 Edit Comment

All users can modify their own comments. This feature would be made available in an upcoming release.

5.3 Return Records

5.3.1 Return All Records

Retrieves all records within the database in a simple list format.

5.3.2 Return Filtered Records

Retrieves records that pertain to a given request, this can be a common tag, a user or even a phrase that relates to the desired record.

5.4 Resource History

A feature that will log any data related to the modification of a record, be it a name change, description edit or a URL fix. All history for a record will be viewable with time to show when a change was made and by whom.

6 Security Considerations

6.1 Secure Connections

The system will connect to the authentication server via a secure HTTPS connection for transmission of user personal data. Data streams to and from the user and database will not be encrypted, recognizing the potential risks of this decision as outlined in Section 6.4.

6.2 Data Sanitization

All incoming data from external sources (e.g. user, authorization server, database, etc.) will be sanitized to protect against invalid inputs and SQL injections.

6.3 Authorization

After receiving and sanitizing user information from the authentication server, the system will use the employee title field to determine a user’s authorization level and relevant permissions as outlined in Section 4.1. Users submitting requests without the proper authorization will receive an error message. This results in a strict dependency upon the authentication server in order to receive the necessary information required to authorize users to access the system.

6.4 Associated Risks

This system is not intended to store critical or protected data. As such, there are no significant risks posed by data theft or manipulation. Identified risks include replacement of safe URLs with malicious or inappropriate URLs inserted during database transmissions as well as malicious URLs added within a valid use case by authorized users. Destination URL checking, particularly within the scope of this project, is infeasible.

7 Other Requirements

7.1 Legal Considerations

Employee data is received securely from the authentication server over HTTPS, and because only employee ID numbers are retained and stored in the database, the system complies with all legal requirements for handling employee personal data. The system does not store any critical data and is independent of the external resources it references such that no degree of use or misuse can reasonably incur additional legal liability by virtue of using of this product.