Software Requirements Specification

For

Login Page Website

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1. **Introduction**

   1.1 Purpose

   The purpose of the project is to provide a page for registering and logging into a webpage as a user. Login page is a type of webpage that is used to authenticate a user's identity to differentiate from different users. This also doubles as a practice for working on HTML, CSS and Java Script.

   1.2 Intended Audience

   The audience consists of the user and the developer. The users would be logging into the webpage and registering as an user, while the developer is the one who tests, updates and edits the webpage as an admin.

   1.3 Intended Use

   Access to the SRS and the program is limited to the developer and the professor. The developer shall be able to change details of the program, whether it be as small as changing the color of a button or updating the page as a whole. These

changes must abide by the user's request. As for the users, their main use for the site is for login into the system and registering themselves as a member.

1.4 Scope

The main objective for the project is to make a working authentication page that can identify and register users as an individual.

The website shall provide the capability for the user to:

1. Log in with a registered ID.

2. The user can check the profile of their account.

3. The user can log out whenever they wish with the logout button.

4. The user can create an account with an email.

The following are the potential risks that could occur in the deployment of the product:

1. Differentiating spams.

2. Unauthorized access to the admin page(not developer)

3. Page would not load.

1.5 Definitions and Acronyms

HTML - HyperText Markup Language

HTML is the set of markup symbols or codes inserted into a file intended for display on the Internet. The markup tells web browsers how to display a web page's words and images. (Hayes, 2020)

CSS - Cascading Style Sheets

CSS describes how HTML elements are to be displayed on screen,

paper, or in other media (w3schools, n.d.)

JavaScript - JavaScript

Java Script is a client-side scripting language, which means the source

code is processed by the client's web browser rather than on the web

server. (TechTerms.com, 2014)

Django - Django

Django is a high-level Python web framework. In this SRS it is used as

the back-end of the website being created. (djangoproject, 2005)

SQL - Structured Query Language

SQL is a standard language for accessing and manipulating databases

(W3schools, n.d.)

SQLite - SQLite

It is an in-process library that implements the SQL database engine.

(SQLite.org, n.d.)

HTTP -HyperText Transfer Protocol

Protocol for fetching HTML documents in between the server and client

(MDN Web Docs, n.d.)

DDoS Attack - Distributed Denial-of-Service (DDoS) Attack

DDoS Attack is a cybercrime in which the attacker floods a server with

internet traffic to prevent users from accessing connected online services and

sites. (fortinet, n.d.)

2. **Overall Description**

   2.1 User Needs

   Users of the product are the following:

   Developer/Website owner

   -The site owner, which in this case, the developer, will be the primary user of the project as the developer would be checking if the page works as intended.

   Website visitor/Professor

   -The visitor, which in this case, the professor, will be visiting the site to check if the login page works as it is intended.

   2.2 Assumptions and Dependencies

   It is anticipated that the developer of the website will have a basic understanding of front-end and back-end coding for the creation of the website. The operator is presumed to have sufficient computer literacy to manage the site, while they are not required to have enough computer knowledge. Furthermore, English would be used as the main language of the website for navigation.

   The front-end of the website will rely on the pre-existing html, css, and javascript syntax. Django will be used as the web framework for the back-end. As per website, it shall depend on a device that can connect to the internet and have a least 800MB-1GB of disk space to access the site and load its components. (hostadvice.com, 2020)

3. System Features and Requirements

3.1 Functional Requirements

The software must be able to perform the following:

1. Display the site's design

2. Have clickable buttons that users can interact with

3. Have a register and login system for users

4. Store the information of the username and passwords of the users

3.2 External Interface Requirements

User Interface

1. A visitor can perform a register from the project website.

2. The site would register the account, and the user can check their

profile, which contains their registered email and their user name.

3. The website shall use English as the default language.

4. The website shall use black and orange as the default color.

Hardware Interface

Any device that wishes to access the website needs to be connected to

the internet in order to view it.

Software Interface

1. The website should run on any device browser with at least 1.9 GHz

x86 - x64 bit dual core processor and 2 GB Ram (Microsoft, n.d.)

2. The website will use SQLite, which is the built in database

management system in Django, to store the user credentials.

3. The Log-in/Sign-up credential will be passed to the database from the site.

Communication Interface

1. When the website is online, it will be operating with HTTP (HyperText Transfer Protocol)

2. When the website is offline, it will be operating on the installed localhost from Django

3.3 System Features

User System Access

Users will be able to register and log in using this system. If ever a feedback system would be developed, it would be a user system since its primary function is an authentication page.

The user system offers a page and interface for visitors to the website to register for an account and use that account to log in. Additionally, it must have a field where users may enter their username, email address, and password. To store these credentials, a database has to be made available. If a password includes at least 8 characters and cannot be totally numeric, the password system can determine this.

3.4 Nonfunctional Requirements

Performance

The project will function as expected on most devices as it is a website and doesn't require a lot of data to show its information. The speed would be fast enough for the web page to load (estimated 2–5 seconds).

Safety

User's data will be handled with highest respect and secrecy. All the personal data, such as username and passwords that have been entered into the authentication system. are applied to this rule. No other data is required to be inputted from the users.

Security

Despite the website being smaller in scope, cyber assaults like DDoS are still a possibility. To secure the website from such action, the developer must take necessary precautions and steps to protect it. Steps like increasing the server bandwidth to handle traffic spikes can be used and implemented into the system (Geerts, 2021).

Quality

The quality of the website will be presentable to the visitors of the site. Even individuals who are not tech savvy will be able to navigate through the user interface.

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