Developing a Basic Personal Blog Website

With HTML

Web Application Development - Project

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Group 6

Introduction

While the internet has no shortage of social networking websites and community forums, there is also no shortage of demand for more spaces to share thoughts and reach out to others. Building on this idea, the intended project is a personal blog website where a user can make and access an account, post short or long form text with images,embedded links, or interactive polls, display it on their own personal page, and view the posts of other people. The intended target users of such a website include social media users looking to try out new platforms, especially those who want to create more curated spaces for their online presence.

Related Concepts, Data Structures, and Algorithms

As this is a simple blog website, no complicated structures or algorithms will be included. Basic lists and sort algorithms will be sufficient. For the general structure of the back-end, main functions such as accounts and users will be separated into their own modules with independent databases. While this may result in redundancy in data, it will be more reliable in case another module fails, as well as in terms of security. For real-time content, concepts such as race conditions and read-write problems may apply.

Main Features

The main pages for this website include a registration section, a login section, a landing page with posts, a profile page with the user's own posts and information, a search results page, an account settings page, and a general settings page. The posts in question may include simple text, attached images, embedded links such as YouTube videos, or interactive elements like polls. When interacting with a post, this includes user analytics that can be viewed by any user.

For the front-end of this project, the website should have all the pages indicated linked together correctly and all elements required to represent the entities that should be seen or interacted with by the users. Furthermore, these elements should be styled in a way that is presentable and pleasing to users with no visible jank or errors in placement. Any interactable content such as buttons and dynamic elements like the amount and content of posts should be properly interactable.

For the back-end of this project, there must be a dedicated database containing any and all data that is used by the website such as account information and post details. This database should be connected with and protected from the front-end through the business layers of the website. Having such a database requires authentication and security so that accounts cannot be accessed by users aside from the account owner.

Timetable and Milestones

February 14 - Project proposal and initial sitemap

February 21 - Project files structure and GitHub repository

February 28 - Basic HTML elements and page design concept

March 7 - CSS styling

March 21 - JavaScript hooks and page links

March 28 - Running database and necessary changes to project structure

April 4 - Set up independent modules

April 11 - Working authentication and session tokens

April 18 - Successful interaction between database and business layer

May 2 - Integration of front-end and back-end

May 9 - Final checks and fixes

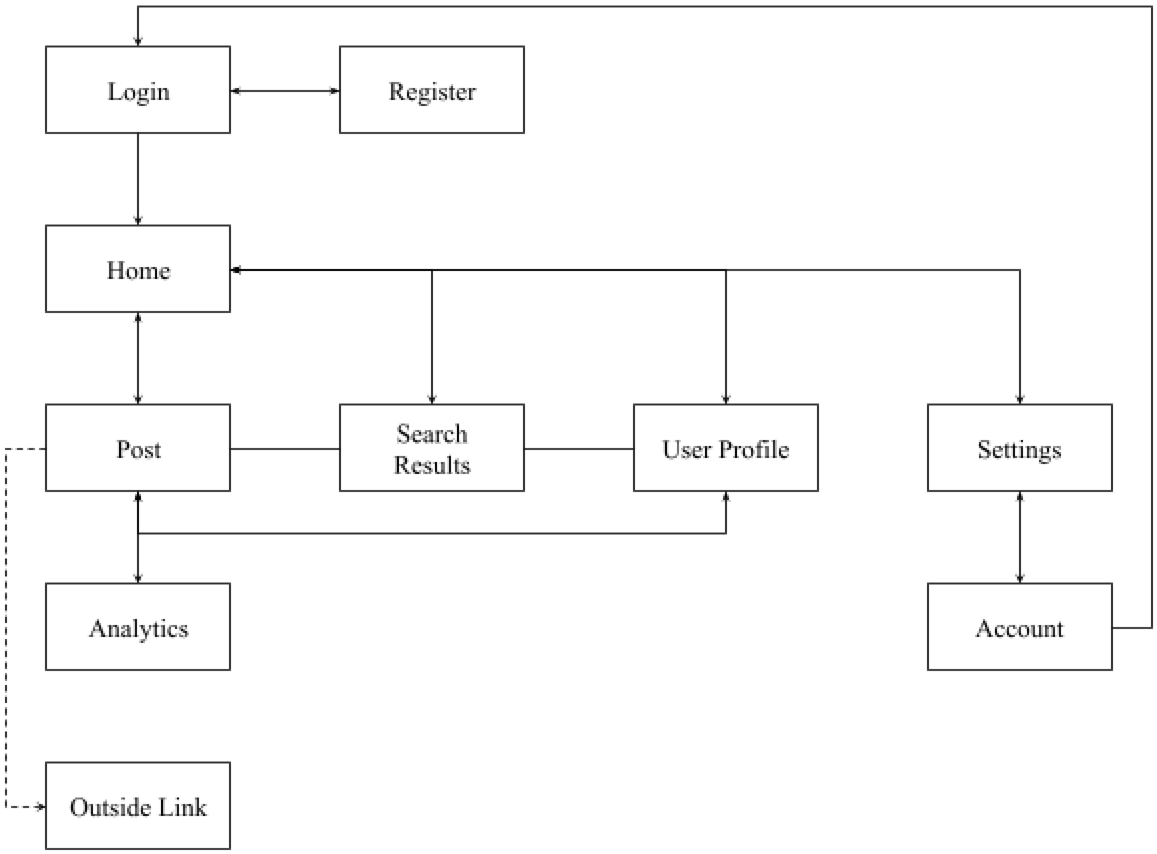
Resources

No hardware is required for this project aside from a personal computer with no special qualities.

For software, a number of tech stacks will be considered. For the front-end, no frameworks will be used, and as such will be developed purely through HTML for main elements, CSS for styling, and JavaScript for interactivity. For the back-end, Node.js and React will be used to facilitate the interactions between the front-end and the database, and the database itself will be handled through MongoDB. An alternative for the back-end in case this is infeasible is to develop the middle layer through Java Spring Boot and handle the database with PostgreSQL.

The package containing the website as well as instructions on how to build it will be stored in GitHub for easy access and reliable version control.

Sitemap



References

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