CODE SNIPPET RECOMMENDER

SOFTWARE SYSTEMS DEVELOPMENT

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What is a Code Snippet Recommender?

Code Snippet Recommender is a system which allows the users to search the JS code snippets by giving input in the form of string of keywords. The system then scans its database for the matching entries and displays them to the user. The user can also copy the code snippet using the copy button and upvote/downvote using the like/dislike button. This rating functionality is available only for the users signed in currently.
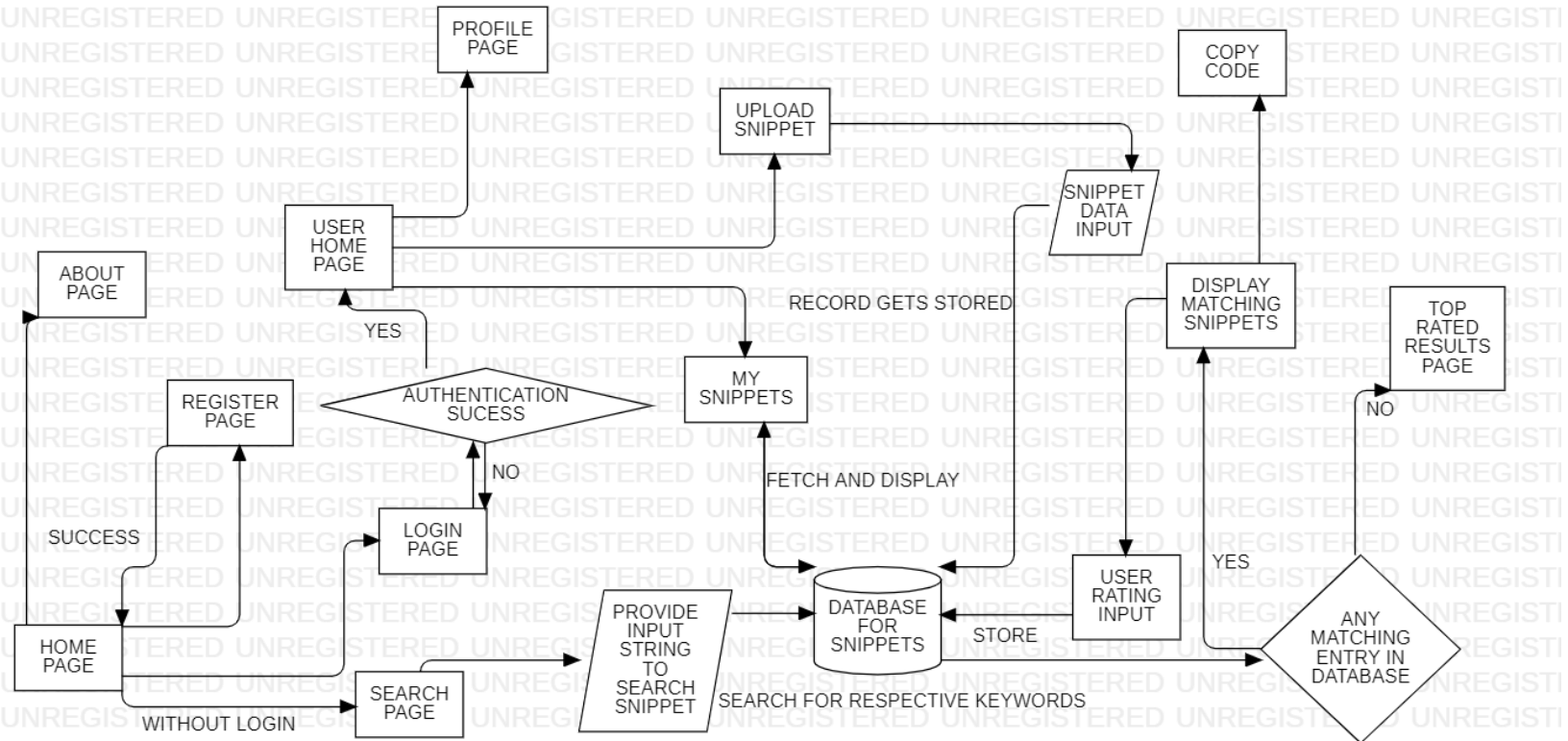
WHY?

Code Snippet Recommender makes it easy for developers community to quickly search the short but commonly known code snippets using a string of valid keywords. Also, it gives the developers community a facility to upload and hence contribute their own code snippets which will then be available to the other developers as well.
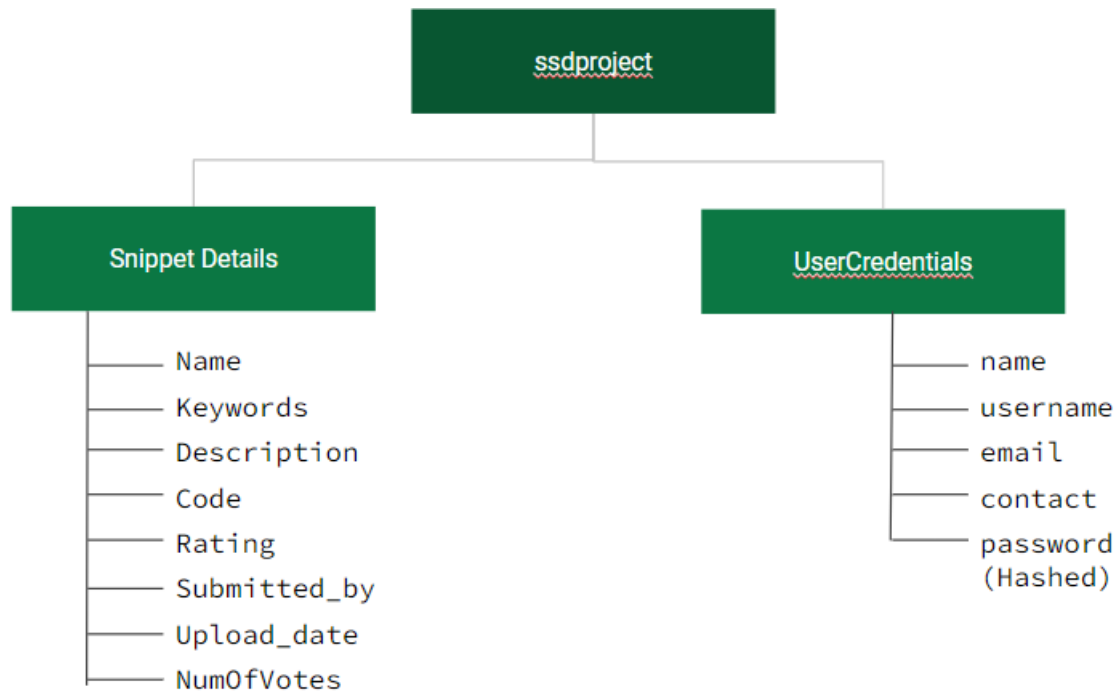
Language/ Tech Stack

1. Flask-Python for backend work.

2. HTML/CSS/JS – for frontend

3. MongoDB – for database

Flowchart Of Website

PROFILE PAGE

COPY CODE

UPLOAD SNIPPET

USER HOME PAGE

SNIPPET DATA INPUT

DISPLAY MATCHING SNIPPETS

ABOUT PAGE

RECORD GETS STORED

TOP RATED RESULTS PAGE

YES

AUTHENTICATION SUCESS

MY SNIPPETS

REGISTER PAGE

NO

FETCH AND DISPLAY

NO

SUCCESS

LOGIN PAGE

USER RATING INPUT

YES

HOME PAGE

PROVIDE INPUT STRING TO SEARCH SNIPPET

DATABASE FOR SNIPPETS

STORE

ANY MATCHING ENTRY IN DATABASE

WITHOUT LOGIN

SEARCH PAGE

SEARCH FOR RESPECTIVE KEYWORDS

Mongo DB Schema:


```
ssdproject
├── Snippet Details
│   ├── Name
│   ├── Keywords
│   ├── Description
│   ├── Code
│   ├── Rating
│   ├── Submitted_by
│   ├── Upload_date
│   └── NumOfVotes
│
└── UserCredentials
    ├── name
    ├── username
    ├── email
    ├── contact
    └── password
        (Hashed)
```

Use Cases:

1. A developer new to JavaScript but proficient in any other programming language who may be able to derive the logic/algorithm to solve a problem but not code it in JavaScript may pick up small snippets of commonly used logics to help him solve the problem.
2. JavaScript development community can use the system as a large verified repository of JavaScript code snippets, both for helping out newcomers and automate trivial tasks of seasoned professionals.
3. User will be able to search for JavaScript code snippets so that he/she can use them in their applications.
4. Students can refer our system for learning JavaScript in beginner stage.
5. Developers can refer our system for recapitulating syntaxes that they may have forgot, or only remember part of. They may also use it for checking their code of incorrect syntaxes.
6. Publishers and Teachers can understand and use the most highly rated snippets of our system.
7. Our system's capabilities can also be very easily modified to create private snippet repositories for large enterprises (such as Google) for use within the company. This can be very helpful for new hires to make sense of very large codebases, as well as technologies which are internal to the company.
8. In programming a single task can usually be done in multiple ways, when multiple developers submit code for same task, all are saved to preserve uniqueness. Anyone who searches for such snippets will be shown all versions, so that they may learn multiple ways of doing the same tasks.