An Internship Project Report on

"Resume Filtering"

Submitted by

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Under the guidance of

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CANDIDATE'S DECLARATION

We hereby certify that the project work, entitled **"Resume Filtering"** in partial fulfilment of the requirements for the award of the Degree of **BACHELOR OF TECHNOLOGY** in **COMPUTER SCIENCE AND ENGINEERING** with specialization in **BFSI, BAO, BigData,** University of Petroleum & Energy Studies, Dehradun, is an authentic record of our work carried out during a period from **7-june-2021** to **22-July-2021** under the supervision of **Dr. Shaurya Gupta, Assistant Professor-Senior Scale.**

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The matter presented in this project has not been submitted by us for the award of any other degree of this or any other University.

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. Shaurya Gupta
Project Guide
Assistant Professor
UPES, Dehradun

ACKNOWLEDGEMENT

We would like to express our thanks of gratitude to our teacher, **Dr. Shaurya Gupta ,** as well as Celebal Technologies Mentor, **Mr. Deepak Sogani,** who gave us the opportunity to do this project on the topic **Resume Filtering**. This work would not have been possible without their support and valuable suggestions.

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We are also grateful to **Dr. Priyadarsan Patra,** Dean- SoCS, UPES for giving us the necessary facilities to carry out our project work successfully.

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ABSTRACT

Resume Filtering is a tool which filters the student skills from the resumes to the job requirements from Employers, Department and Faculty looking for student interns, full-time employees and also Research, Graduate and Teaching Assistants. Resume Filtering hosts student resumes, Academic history and contact information. Authorized users from the Department can post jobs, view job applicants and this tool automatically sorts the students resumes based on the degree of match with the job. This also sends e-mail to students about the jobs posted and keeps track of employer's history by maintaining the complete history of jobs posted from the employers.

INTRODUCTION

Resume Filtering is web-application developed using Javascript technologies running with node.js express server. It uses node.js framework to manage the business logic and handle the client requests to the server. The database interface is developed sequelize ORM to access the POSTGRES database. The user interface uses express handlebars to provide a dynamic web environment. Users can access the application over internet and perform the actions which they are authorized to do like post jobs, apply to jobs and receive email.

LITERATURE REVIEW

- In [1] a research paper named **A Proposed Methodology for Web Development** by *Debra Howcroft (University of Salford), John Carroll(University of Salford)* in 2000 states that "The aim of this paper is to examine the domain of World Wide Web site development and propose a methodology to assist with this process. Methodologies have both their proselytizers and those who decry the constraints and rigidity of prescriptive frameworks. The methodology presented here is not intended to be a universal panacea for the problems of web development; rather it is hoped it will provide a useful framework for guiding the process."

- In [2] a research paper named **An Analysis of HTML and CSS Syntax Errors in a Web Development Course** by *Brain Dorn* and team: - Many people are first exposed to code through web development, yet little is known about the barriers beginners face in these formative experiences. In this article, we describe a study of undergraduate students enrolled in an introductory web development course taken by both computing majors and general education students. Using data collected during the initial weeks of the course, we investigate the nature of the syntax errors they make when learning HTML and CSS, and how they resolve them. This is accomplished through the deployment of openHTML, a lightweight web-based code editor that logs user activity. Our analysis reveals that nearly all students made syntax errors that remained unresolved in their assessments, and that these errors continued weeks into the course. Approximately 20% of these errors related to the relatively complex system of rules that dictates when it is valid for HTML elements to be nested in one another. On the other hand, 35% of errors related to the relatively simple tag syntax determining how HTML elements are nested. We also find that validation played a key role in resolving errors: While the majority of unresolved errors were present in untested code, nearly all of the errors that were detected through validation were eventually corrected. We conclude with a discussion of our findings and their implications for computing education.

METHODOLOGY

The application had been planned to consist of two parts- front-end and back-end development. The front-end is the part of the web that you can see and interact with (e.g. Client-side programming). While front-end code interacts with the user in real time, the back-end interacts with a server to return user ready results. This project mainly focuses on the front-end part of the website. We have used HTML, CSS and JavaScript to develop an interactive design of the website.

3.1 HTML

HTML (Hyper Text Markup Language) is the standard markup language for documents designed to be displayed in a web browser. It is used to design the layout of a web page.

In this project, we have used many HTML tags like div, nav, button, form, etc to achieve the desired web pages. This site contains 3 web pages in total which are:

1. Home Page
2. List Page
3. Add Resume Page

3.2 CSS

CSS (Cascading Style Sheets) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML.

We have used different CSS properties such as flex box, grid, etc to present our web pages in a better looking way. CSS makes a web page presentable by applying different properties on the HTML tags.

In this project, every web page has their own style sheets in which all the design properties are defined according to the web pages.

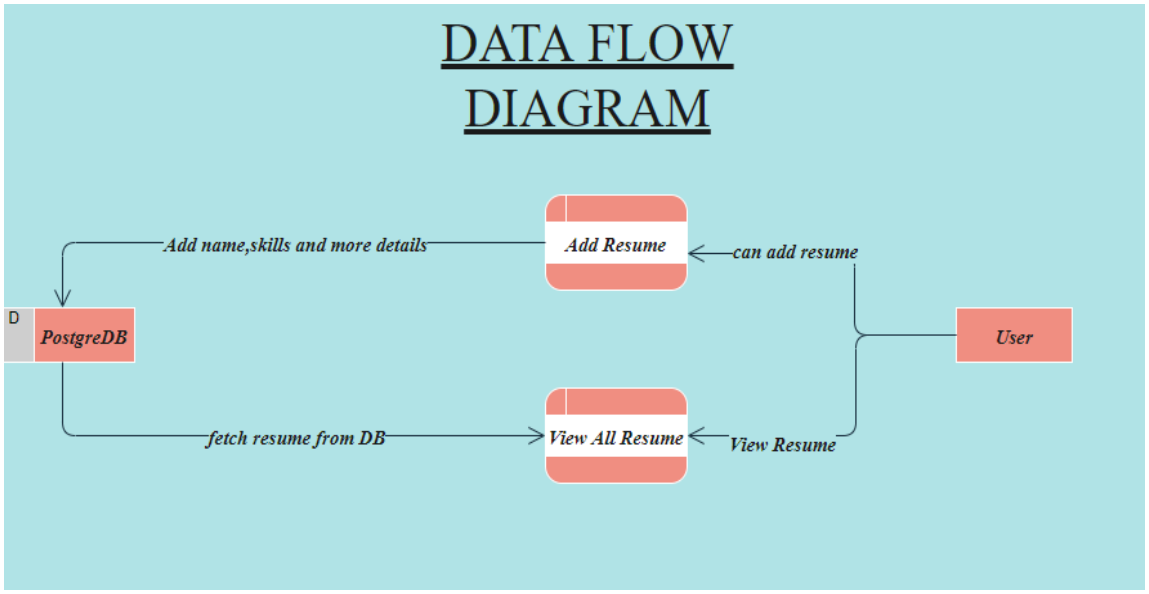
3.3 Node.js

Node.js is an open-source, cross-platform, back-end JavaScript runtime environment that runs on the V8 engine and executes JavaScript code outside a web browser. Node.js is primarily used for non-blocking, event-driven servers, due to its single-threaded nature. It's used for traditional web sites and back-end API services, but was designed with real-time, push-based architectures in mind.

3.4 Node.js Express

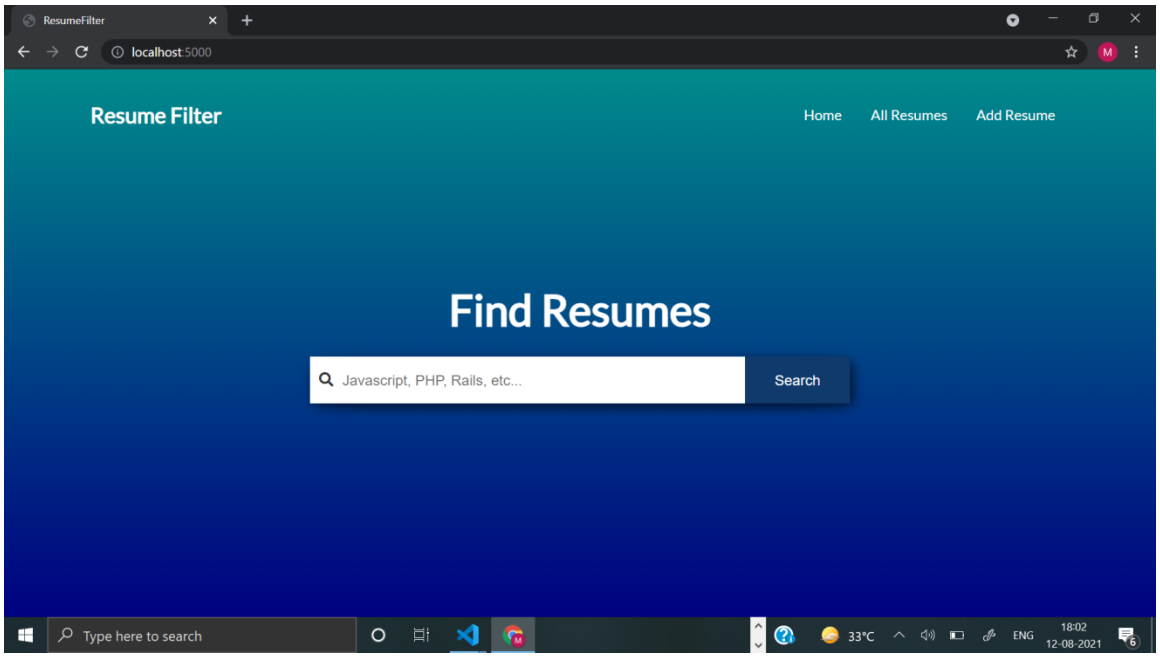
Express is one of the most popular web frameworks for Node.js that supports routing, middleware, view system… Sequelize is a promise-based Node.js ORM that supports the dialects for PostgreSQL, MySQL, SQL Server… In this tutorial, I will show you step by step to build Node.js Restful CRUD API using Express, Sequelize with PostgreSQL database.

DFD Diagram

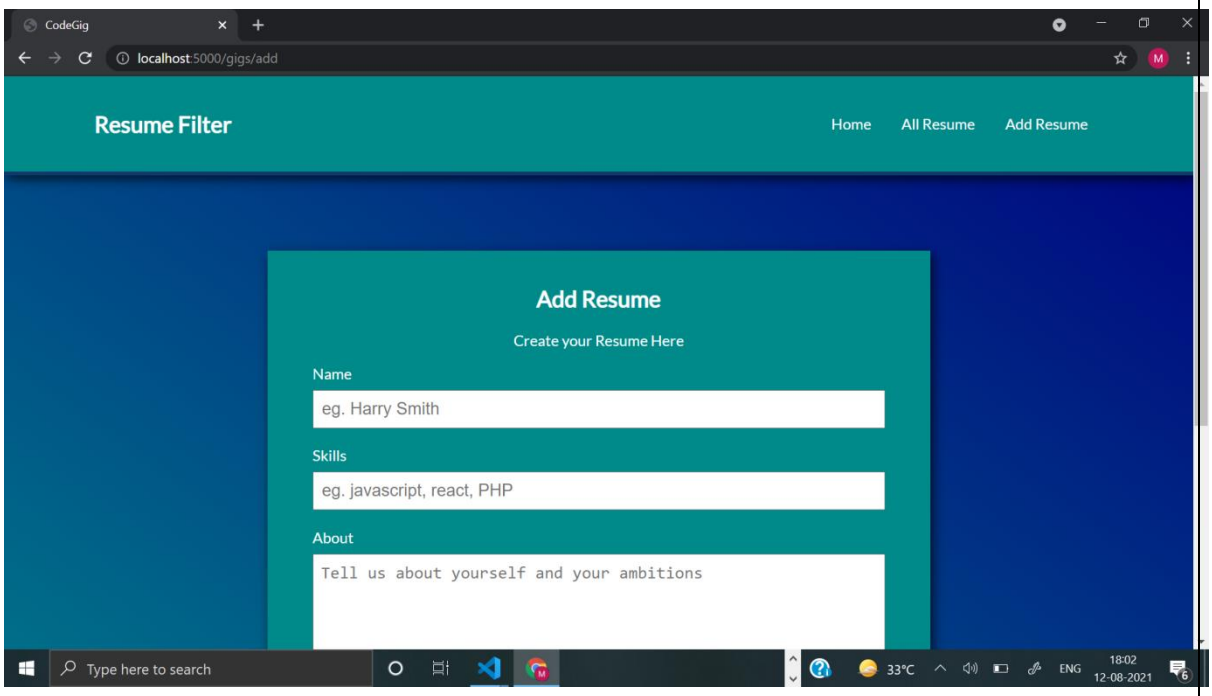

DATA FLOW DIAGRAM
Add name,skills and more details
Add Resume
can add resume
D
PostgreDB
User
fetch resume from DB
View All Resume
View Resume

RESULTS

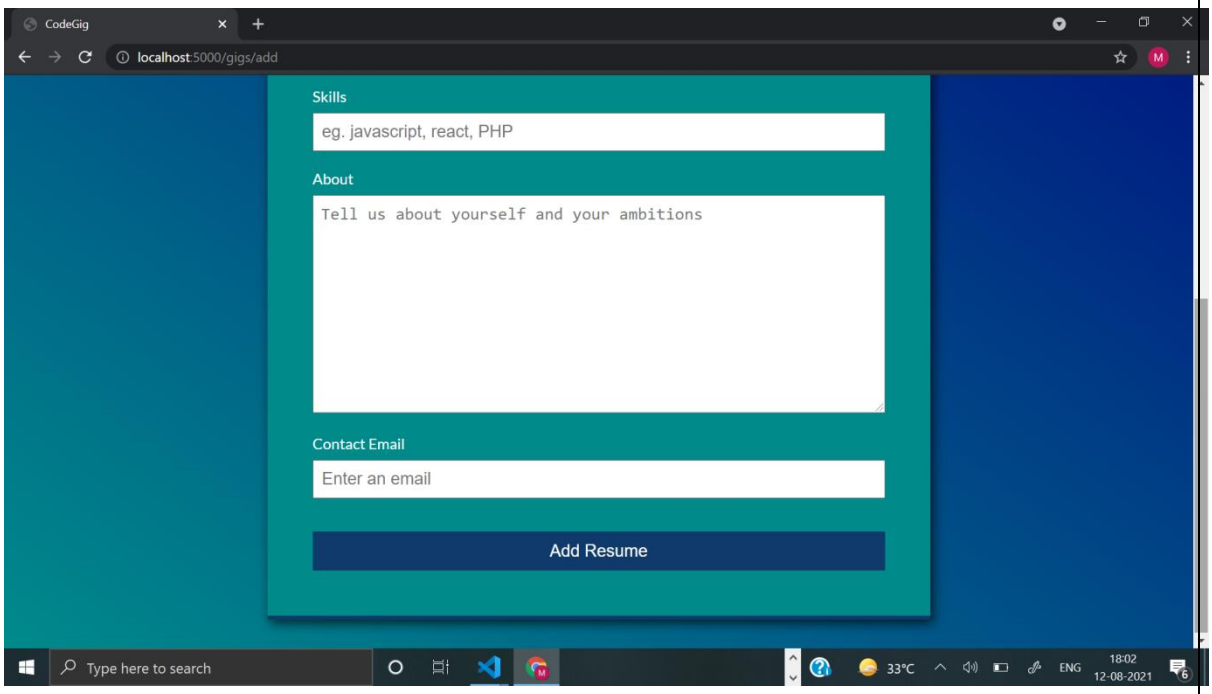
1.


ResumeFilter
localhost:5000
Resume Filter
Home
All Resumes
Add Resume
Find Resumes
Javascript, PHP, Rails, etc...
Search
Type here to search
33°C
ENG
18:02
12-08-2021

2.


CodeGig
localhost:5000/gigs/add
Resume Filter
Home
All Resume
Add Resume
Add Resume
Create your Resume Here
Name
eg. Harry Smith
Skills
eg. javascript, react, PHP
About
Tell us about yourself and your ambitions
Type here to search
33°C
ENG
18:02
12-08-2021

3.


CodeGig
localhost:5000/gigs/add
Skills
eg. javascript, react, PHP
About
Tell us about yourself and your ambitions
Contact Email
Enter an email
Add Resume
Type here to search
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12-08-2021

CONCLUSION AND FUTURE WORK

In future, we can work on back-end as well to make it a fully functional website. A profanity filter can also be added to restrict the use of foul language on the website. Similarly, we can add other features to this website to further improve it for the users.

This project provides a platform to the people to filter their resume.

This internship has been an excellent and rewarding experience for us. We can conclude that there have been a lot we all have learnt from our work at this internship.

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[2] An Analysis of HTML and CSS Syntax Errors in a Web Development Course

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