



Resume Maker Application: ResumeWiz

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Abstract: Nowadays there is a tough competition for getting a job and one of the biggest trials for many jobseekers is creating the perfect resume. The resume is the very first thing that a potential employer encounters regarding an applicant and is used to screen applicants, often followed by an interview. The quality of a resume plays a pivotal role in securing employment opportunities. However, traditional methods of resume creation using tools like Microsoft Word or Google Docs are often cumbersome and prone to formatting inconsistencies.

ResumeWiz is a revolutionary web application designed to streamline the process of resume creation, leveraging modern web technologies to automate formatting and alignment.

It is a React Web Application which helps you build your resume by just following the different steps and simply entering your data. The alignment, formatting and generation of your resume is automatically handled by ResumeWiz, simply enter your data and get a pdf file of your resume! This will be very convenient for all the users as it will save their time in designing and building a resume.

Index Terms – Database, Python, HTML, CSS, JavaScript

I. Introduction

Problem Statement

As placement season of most of the colleges is going to start, making Resume is a very hectic work for all the students. Also, many companies judge the candidature of a student just by his/her Resume. So, it is necessary for the student to think beyond the third dimension while making the Resume.

- It is the Web Application which helps students to get their resume in hand just by filling up a simple form where important credentials need to be filled.
- The resume is downloadable in PDF format. Also, the user can log in again to access the previous resume that he had made.
- The resume is of Standard Format as stated by most of the Engineering Colleges of India.

Technical Specification

The specifications used in frontend are HTML, CSS, JavaScript, react, react-dom, react-scripts. The software used for backend is MongoDB.

II. LITERATURE REVIEW

A. Manual Creation of Resumes

Traditionally, resumes were manually crafted using word processing software like Microsoft Word. Applicants typically included personal information such as name, address, and contact details. Education history was outlined comprehensively, spanning from early education to recent qualifications. The format varied widely, often resulting in resumes that were either too brief or excessively detailed. Standardization in resume length and content was lacking, leading to inconsistencies in presentation and information.

B. Inferences for Modern Resume Writing

From the literature reviewed, several insights emerge regarding modern resume writing practices. It is recommended to include essential personal details such as name, contact information, and professional email address while avoiding unnecessary personal information like height, weight, religion, birth date, and marital status. The preferred resume length has shifted towards concise one-page documents, emphasizing relevant achievements and skills tailored to the job applied for.

The evolution from manual to automated resume creation methods highlights a transition towards efficiency and standardization in the job application process. Automated tools like ResumeWiz offer users a user-friendly interface to create polished resumes that meet industry standards while minimizing formatting errors and inconsistencies. Future research could explore further enhancements in AI-driven resume optimization and integration with job application platforms, ensuring continued relevance and effectiveness in the competitive job market.

III. EXISTING SYSTEM PROBLEM

The existing system is creating resumes manually either by using word or Google doc so there are some issues with the existing system. The existing system was suffering from a series of drawbacks. Since the whole of the system was to be maintained with hands the process of keeping, maintaining and retrieving the information was very tedious and lengthy. The records were never used to be in a systematic order there used to be lots of difficulties in associating any particular transaction with a particular context. If any information was to be found it was required to go through the different registers, documents there would never exist anything like report generation. There would always be unnecessary consumption of time while entering records and retrieving records.

One more problem was that it was very difficult to find errors while entering the records. Once the records were entered it was very difficult to update these records.

IV. Proposed System Design

Module Description

React is a declarative, efficient, and flexible JavaScript library for building user interfaces. It lets you compose complex UIs from small and isolated pieces of code called “components”.

ReactDOM is a package that provides DOM specific methods that can be used at the top level of a web app to enable an efficient way of managing DOM elements of the web page. ReactDOM provides the developers with an API containing the following methods and a few more.

React-scripts are simply scripts to run the build tools required to transform React JSX syntax into plain JavaScript programmatically.

UML Diagram/pseudocode



Fig. 1 UML Design/Pseudocode



Database/Schema Description

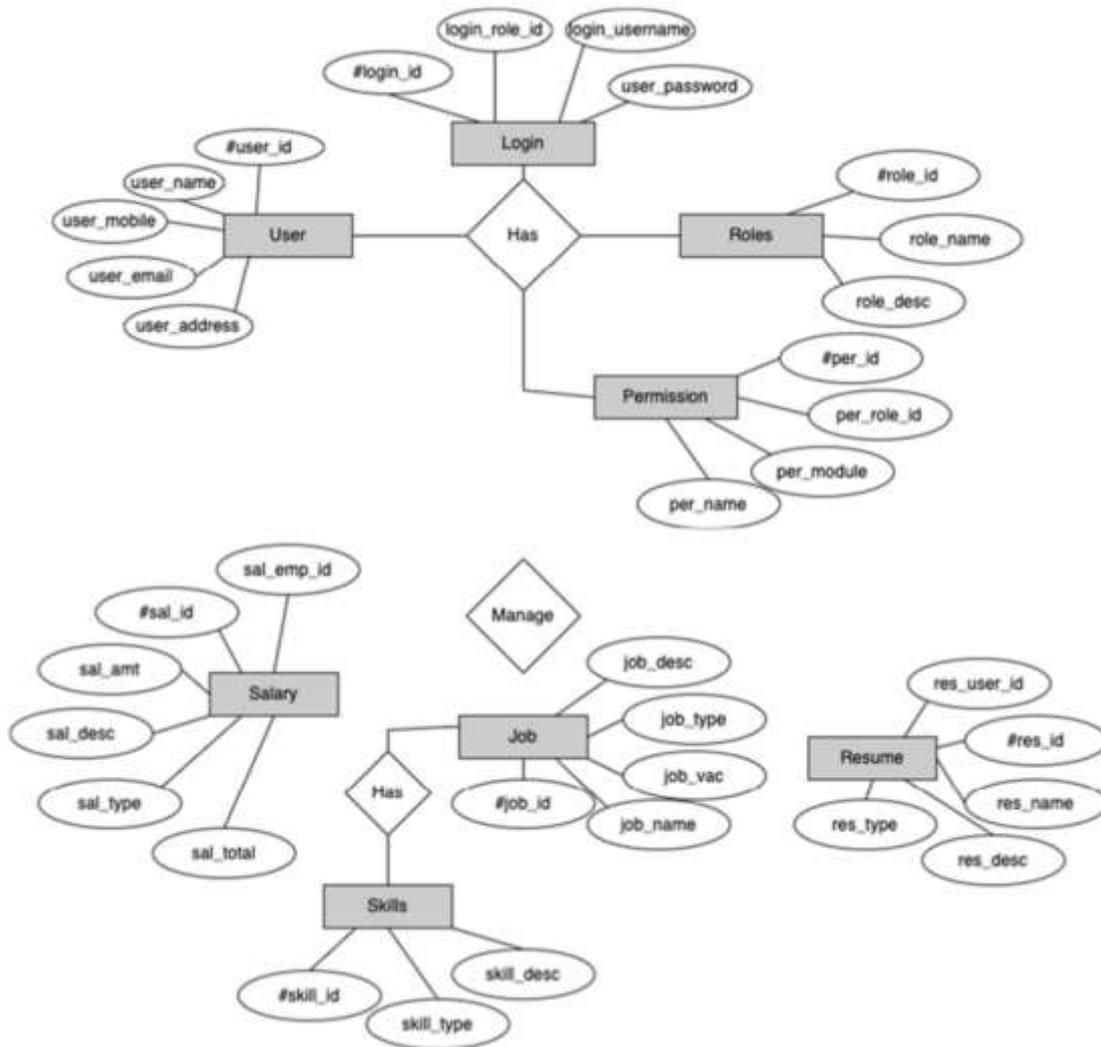


Fig. 2 Database description

V. Frontend Design

The specifications used in the frontend are HTML, CSS, JavaScript, React, react-dom, react-scripts.

- **HTML (HyperText Markup Language):** The backbone of the web application structure. HTML is used to define the elements of the application such as forms, input fields, buttons, and containers. Each element is structured in a way to facilitate the collection and display of user information.
- **CSS (Cascading Style Sheets):** Responsible for the styling and layout of the web application. CSS ensures that the application is visually appealing and provides a consistent user experience. It handles aspects such as font styles, colors, spacing, and responsive design to make the application look good on different devices.
- **JavaScript:** Adds interactivity and functionality to the web application. JavaScript is used to handle user inputs, form submissions, and dynamic content updates. It ensures that the application responds to user actions such as clicking buttons and entering data.
- **React:** A popular JavaScript library for building user interfaces. React allows for the creation of reusable components, which can manage their own state and render efficiently when the state changes. This modular approach makes it easier to develop and maintain the application.
- **React-DOM:** A package that provides DOM-specific methods to manage DOM elements efficiently. React-DOM integrates React with the browser's Document Object Model (DOM) to ensure that the application renders correctly and performs well.
- **React-Scripts:** A set of scripts used to run the build tools required to transform React JSX syntax into plain JavaScript. React-Scripts simplify the setup and configuration of a React application, allowing developers to focus on building the application rather than configuring the build tools

User Interface Components:

1. **Header Component:** Displays the application title and navigation links.
2. **Form Component:** Collects user data through various input fields such as text inputs, text areas, and dropdowns.
3. **Preview Component:** Provides a real-time preview of the resume as the user fills out the form, allowing users to see how their resume will look.
4. **Download Button:** Enables users to download the generated resume as a PDF file.
5. **Login and Registration Forms:** Allow users to create an account and log in to access their saved resumes.

Form Components:

- **Personal Information:** Fields for entering name, email, phone number, and address.
- **Education:** Fields for entering educational qualifications such as degree, institution, and year of graduation.
- **Work Experience:** Fields for entering job titles, company names, durations, and descriptions of responsibilities.
- **Skills:** Fields for listing relevant skills and proficiencies.
- **Projects:** Fields for detailing significant projects, including project names, descriptions, and technologies used.

Components Overview:

1. Header Component:

- Displays the application title and navigation links.
- Example Code:

```

const Header = () => {
  <header>
    <h1>ResFast - Build Your Resumes</h1>
    <nav>
      <a href="#home">Home</a>
      <a href="#login">Login</a>
      <a href="#register">Register</a>
    </nav>
  </header>
}

```

Fig. 3 Header Code

2. Form Component:

- Collects user data through various input fields such as text inputs, textareas, and dropdowns.
- Handles form submission and data validation.
- Example Code:

```

const handleOnChange = (e) => {
  setFormData({
    ...formData,
    [e.target.name]: e.target.value
  });
};

const handleOnSubmit = (e) => {
  e.preventDefault();
  // Logic to generate PDF
};

return (
  <form onSubmit={handleOnSubmit}>
    <label>Name:</label>
    <input type="text" name="name" value={formData.name} onChange={handleOnChange}>
    <label>Email:</label>
    <input type="email" name="email" value={formData.email} onChange={handleOnChange}>
    <label>Education:</label>
    <textarea name="education" value={formData.education} onChange={handleOnChange}>
    <label>Experience:</label>
    <textarea name="experience" value={formData.experience} onChange={handleOnChange}>
    <label>Skills:</label>
    <textarea name="skills" value={formData.skills} onChange={handleOnChange}>
    <label>Projects:</label>
    <textarea name="projects" value={formData.projects} onChange={handleOnChange}>
    <button type="submit">Generate PDF</button>
  </form>
)

```

Fig. 4 Code for the Form part

3. Preview Component:

- Provides a real-time preview of the resume as the user fills out the form.
- Example Code:

```

const Preview = ({ formData }) => {
  <div>
    <h2>Preview</h2>
    <p>{formData.name}</p>
    <p>{formData.email}</p>
    <p>{formData.education}</p>
    <p>{formData.experience}</p>
    <p>{formData.skills}</p>
    <p>{formData.projects}</p>
  </div>
};

```

Fig. 5 Code for the Preview part

4. Download Button:

- Allows users to download the generated resume as a PDF file.
- Example Code:

```

const DownloadButton = ({ generatePdf }) => {
  <button onClick={generatePdf}>Download PDF</button>
};

```

Fig. 6 Code for the Download button

5. Login and Registration Forms:

- Enable users to create an account and log in to access their saved resumes.
- Example Code:

```

const LoginForm = () => {
  <form>
    <label>Email:</label>
    <input type="email" required />
    <label>Password:</label>
    <input type="password" required />
    <button type="submit">Login</button>
  </form>
};

const RegisterForm = () => {
  <form>
    <label>Email:</label>
    <input type="email" required />
    <label>Password:</label>
    <input type="password" required />
    <button type="submit">Register</button>
  </form>
};

```

Fig. 7 Code for login and registration

Integration with Backend:

- **User Authentication:** Users can sign up and log in to the application. The authentication details (e.g., email and password) are stored in the backend database.
- **Data Storage:** User data entered through the form is saved in the backend database (MongoDB). This allows users to access and modify their resumes later.
- **PDF Generation:** Once the form is submitted, the data is sent to the backend where the PDF resume is generated and made available for download.

```

setFormData={() => {
  ...formData,
  [e.target.name]: e.target.value
}});

const handleSubmit = async (e) => {
  e.preventDefault();
  try {
    const response = await axios.post('/api/generate-resume', formData);
    const pdfUrl = response.data.pdfUrl;
    window.open(pdfUrl, '_blank');
  } catch (error) {
    console.error('Error generating PDF:', error);
  }
};

return (
  <div>
    <header />
    <form onSubmit={handleSubmit}>
      <label>Name:</label>
      <input type="text" name="name" value={formData.name} onChange={handleC... />
      <label>Email:</label>
      <input type="email" name="email" value={formData.email} onChange={handleC... />
      <label>Education:</label>
      <textarea name="education" value={formData.education} onChange={handleC... />
      <label>Experience:</label>

```

Fig. 8 Code for the integration part

VI. Backend

The resume table takes an account of all the data of resumes created by the user.

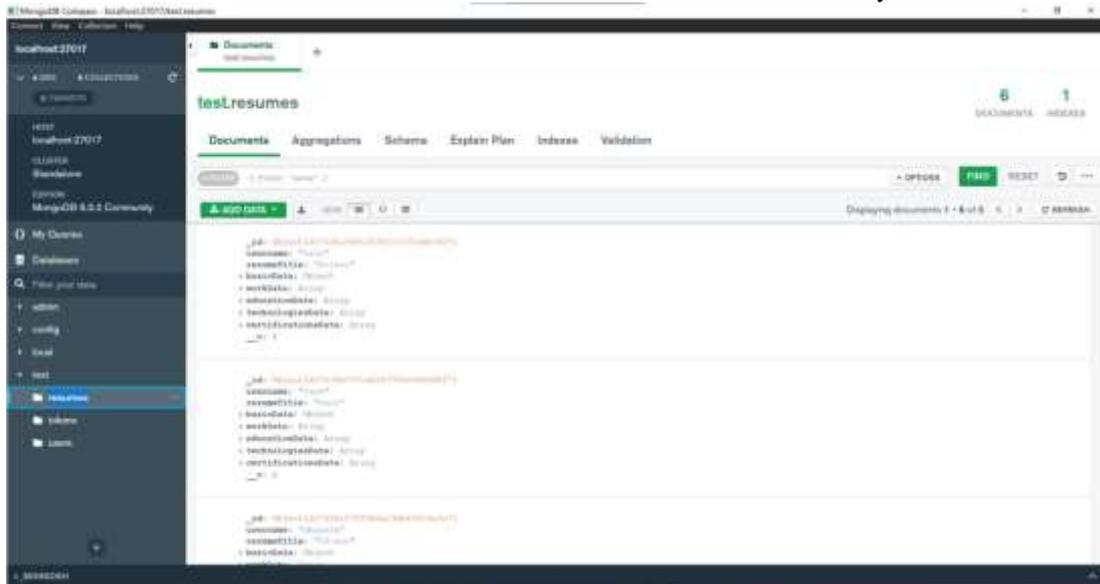


Fig. 9 Resume table in MongoDB

The token table notes the id and email of all the users that have signed up for our website.

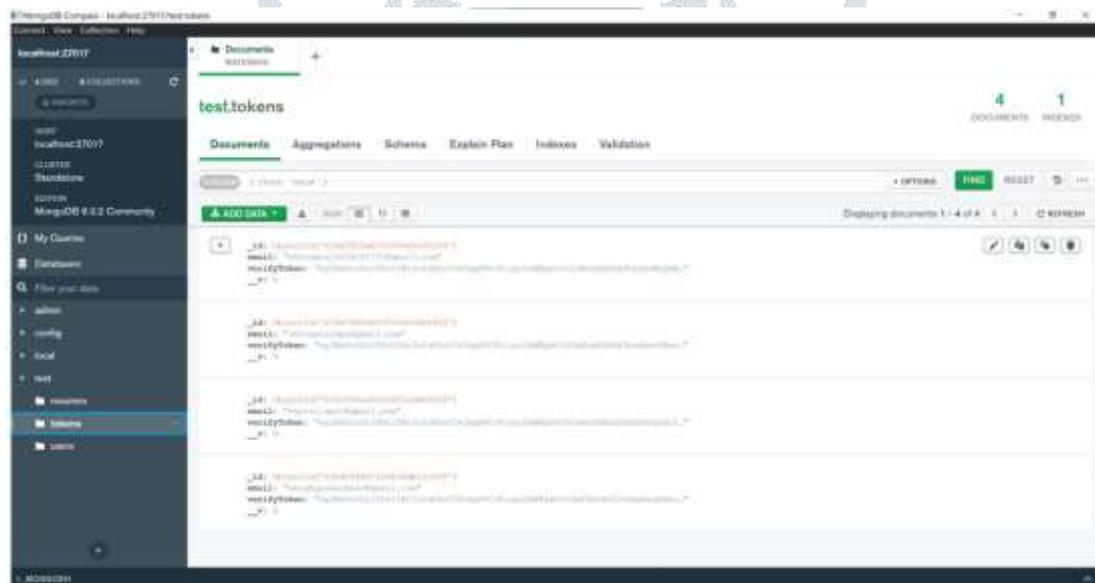


Fig. 10 Token table in MondoDB

The user table stores data of all the active users and also shows who all have verified their email and who have not.

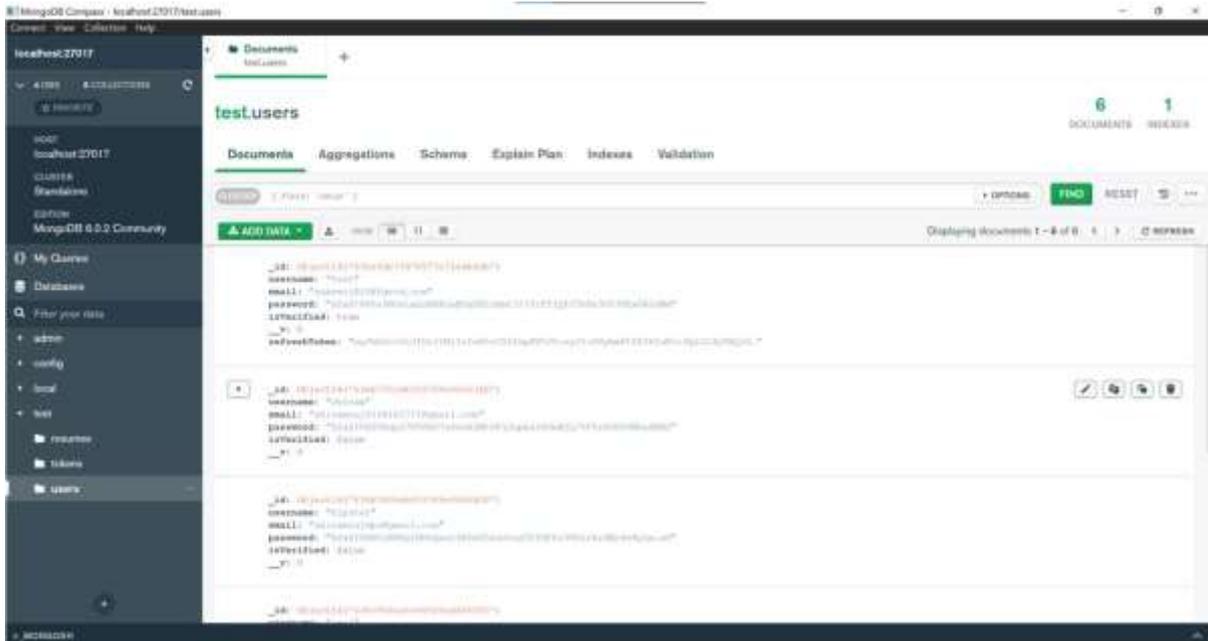
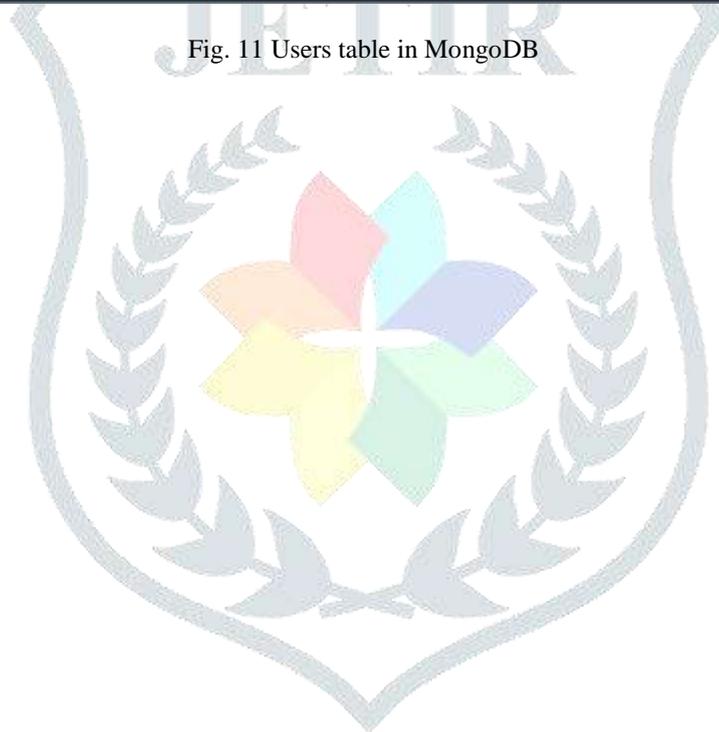


Fig. 11 Users table in MongoDB



VII. Result

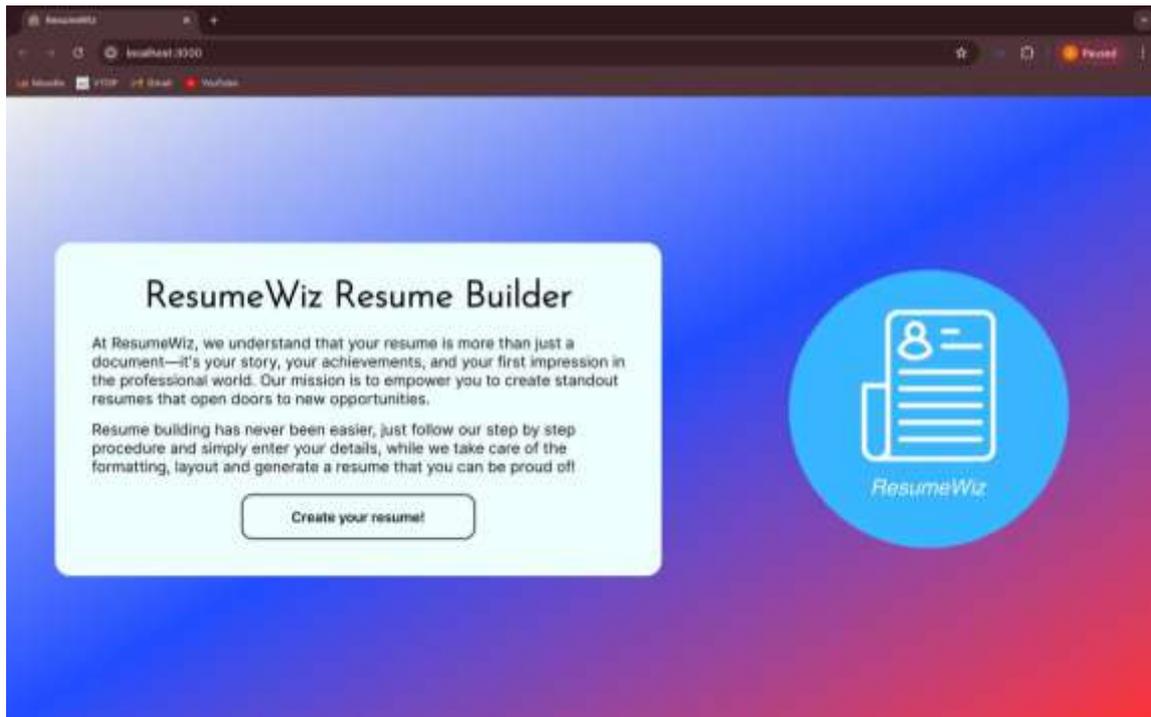


Fig. 12 Homepage screen

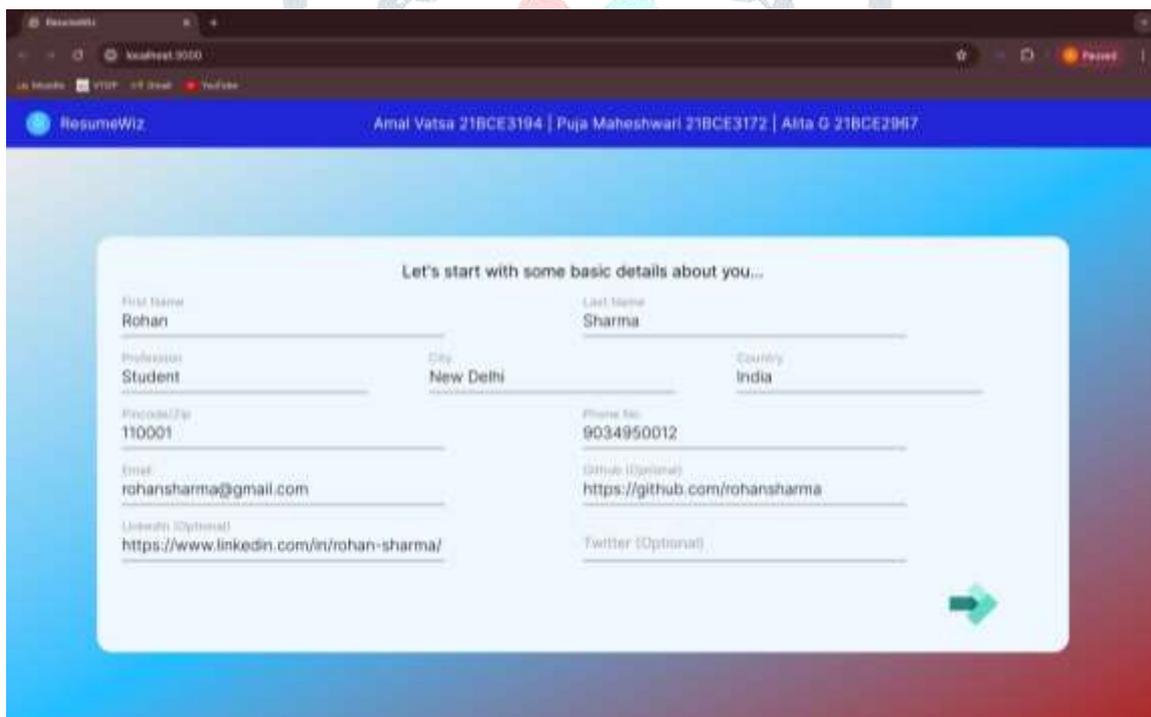


Fig. 13 Basic details input screen

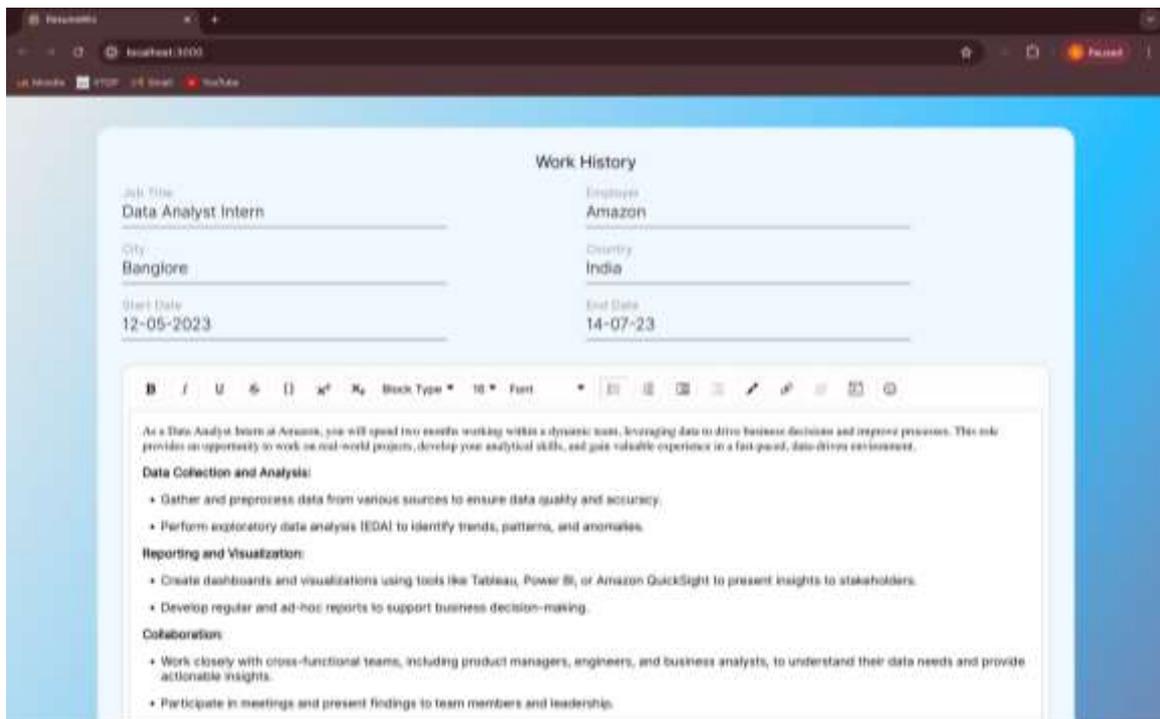


Fig. 14 Work History input screen

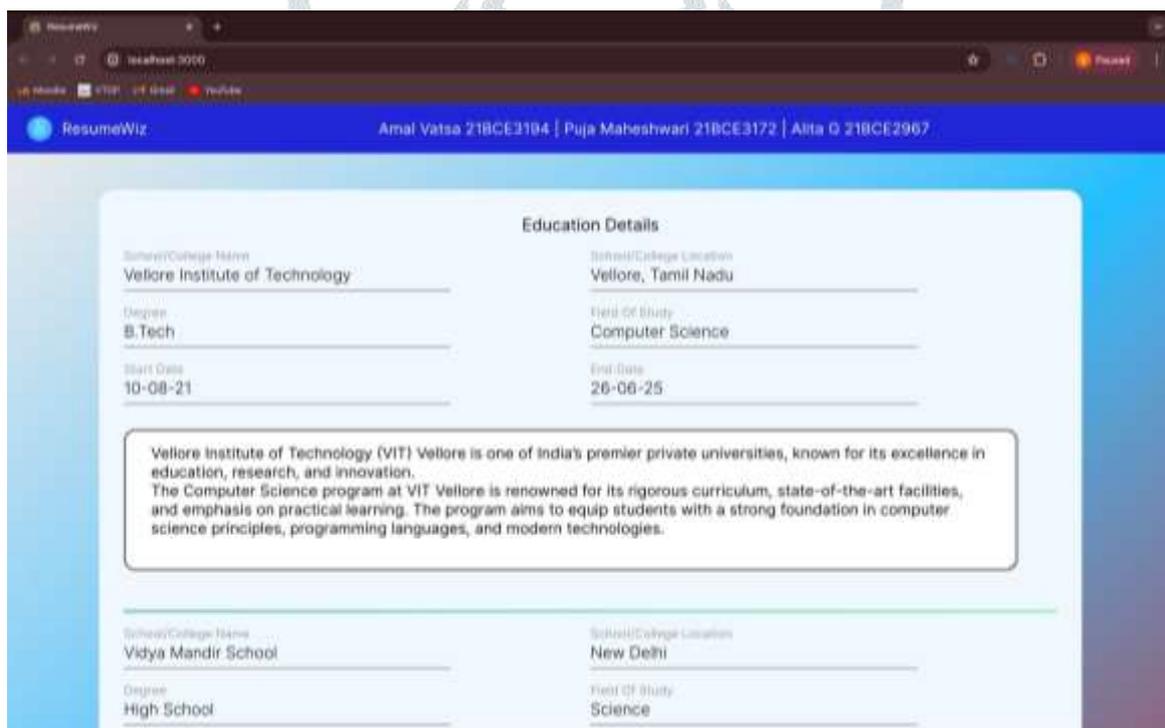


Fig. 15 Education input screen

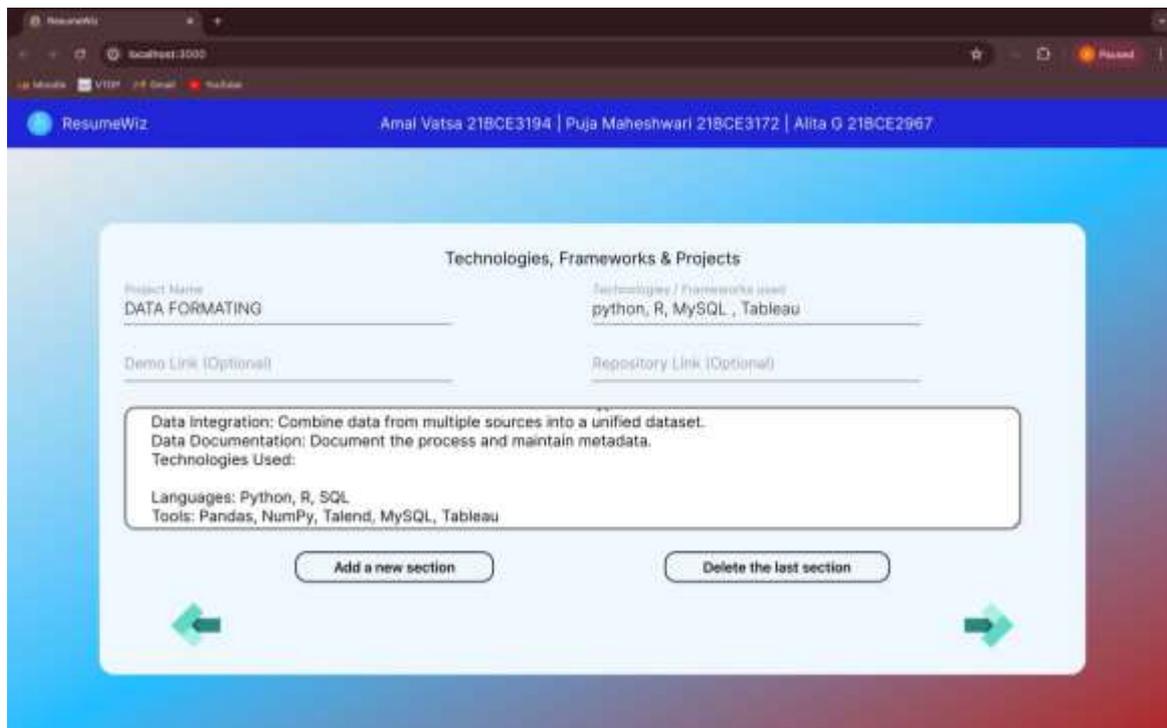


Fig. 16 Technologies, Frameworks & Projects input screen

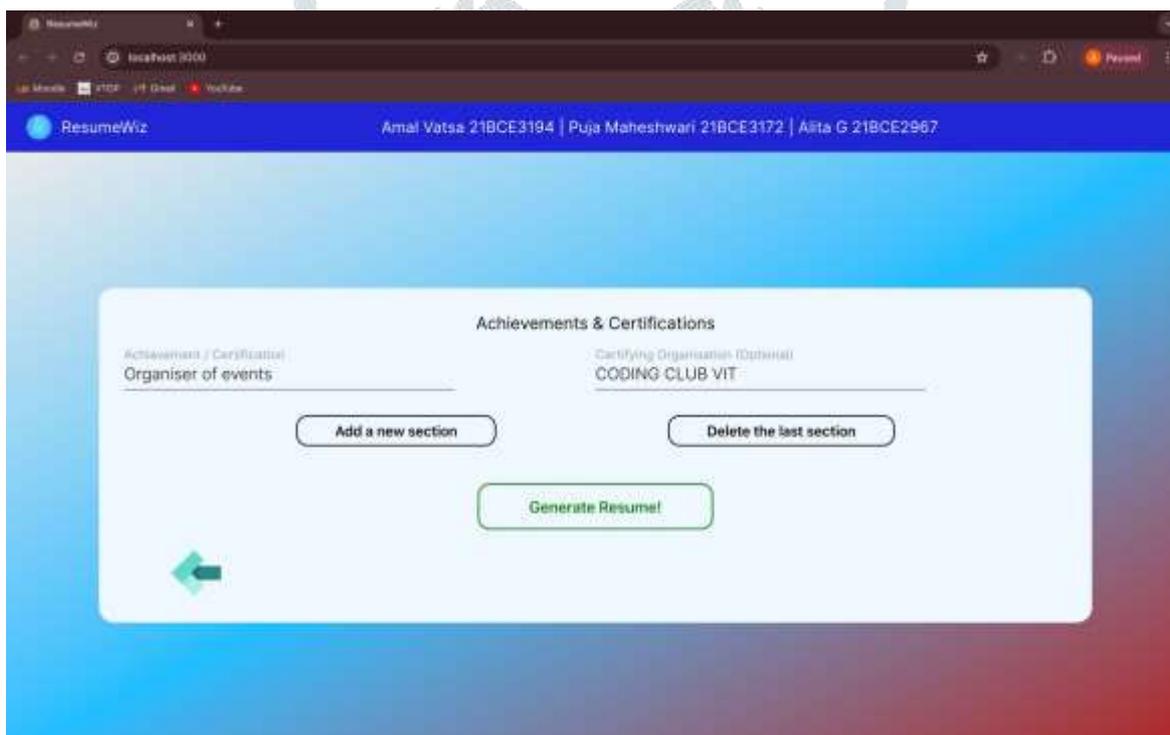
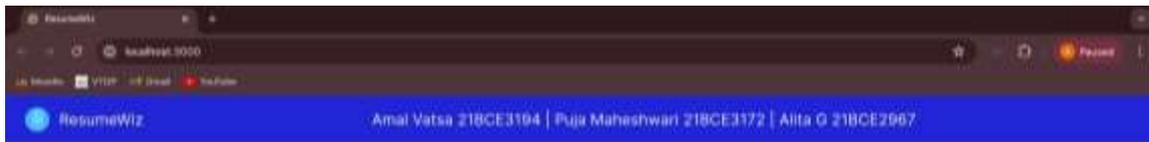


Fig. 17 Achievements & Certifications input screen



Your PDF has been generated! You can see a preview of the generated resume below.

This preview is just for representational purposes, the actual pdf might differ in height based on the amount of content you have. If your pdf gets cut off at a certain length then it means that your text content is too long to create a single page A4 resume, please click on edit details and reduce the content accordingly.

If you want to save the info entered in this form then you need to be logged in first, then click on either "Update Saved" to update a previously saved resume, or "Save New" to save it as a new resume in your account. Saved resumes can be accessed by clicking the link for the same on the navbar once you are logged in.

[Download](#) [Edit Details](#)

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Experience

Amazon 12-05-2023 - 14-07-23
Data Analyst Intern Bangalore, India

As a Data Analyst Intern at Amazon, you will spend two months working within a dynamic team, leveraging data to drive business decisions and improve processes. This role provides an opportunity to work on real-world projects, develop your analytical skills, and gain valuable experience in a fast-paced, data-driven environment. **Data Collection and Analysis:** Gather and preprocess data from various sources to ensure data quality and accuracy. Perform exploratory data analysis (EDA) to identify trends, patterns, and anomalies. **Reporting and Visualization:** Create dashboards and visualizations using tools like Tableau, Power BI, or Amazon QuickSight to present insights to stakeholders. Develop regular and ad-hoc reports to support business decision-making. **Collaboration:** Work closely with cross-functional teams, including product managers, engineers, and business analysts, to understand their data needs and provide actionable insights. **Participate in meetings and present findings to team members and leadership.** **Project Work:** Contribute to ongoing projects and initiatives by applying analytical methods to solve complex business problems. Document and communicate findings, methodologies, and insights clearly and concisely. **Learning and Development:** Engage in

Fig. 18 Resume generated screen



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Experience

Amazon 12-05-2023 - 14-07-23
Data Analyst Intern Banglore , India

As a Data Analyst Intern at Amazon, you will spend two months working within a dynamic team, leveraging data to drive business decisions and improve processes. This role provides an opportunity to work on real-world projects, develop your analytical skills, and gain valuable experience in a fast-paced, data-driven environment. **Data Collection and Analysis:** Gather and preprocess data from various sources to ensure data quality and accuracy. Perform exploratory data analysis (EDA) to identify trends, patterns, and anomalies. **Reporting and Visualization:** Create dashboards and visualizations using tools like Tableau, Power BI, or Amazon QuickSight to present insights to stakeholders. Develop regular and ad-hoc reports to support business decision-making. **Collaboration:** Work closely with cross-functional teams, including product managers, engineers, and business analysts, to understand their data needs and provide actionable insights. Participate in meetings and present findings to team members and leadership. **Project Work:** Contribute to ongoing projects and initiatives by applying analytical methods to solve complex business problems. Document and communicate findings, methodologies, and insights clearly and concisely. **Learning and Development:** Engage in training sessions and workshops to enhance your technical and analytical skills. Receive mentorship and guidance from experienced professionals in the field.

Xsoft 20-09-23 - 29-11-23
Software Developer Intern Pune, India

As a Software Developer Intern at xSoft, you will have the opportunity to work on exciting and innovative projects, contributing to the development of software solutions that impact the company's products and services. This 2-month internship provides hands-on experience in software development, allowing you to enhance your coding skills and collaborate with a talented team of professionals. **Coding and Development:** Write clean, efficient, and maintainable code for various software applications. Participate in the full software development lifecycle, including design, development, testing, and deployment. **Collaboration:** Work closely with senior developers, product managers, and other team members to understand project requirements and deliver high-quality software solutions. Participate in code reviews, providing and receiving constructive feedback. **Project Work:** Contribute to ongoing projects, addressing bugs, implementing new features, and optimizing existing code. Document code, processes, and methodologies to ensure knowledge sharing and project continuity. **Testing and Debugging:** Write and execute unit tests to ensure software quality and reliability. Identify and fix bugs, performance issues, and other software defects. **Learning and Development:** Engage in training sessions and workshops to learn new programming languages, frameworks, and tools. Receive mentorship and guidance from experienced developers, enhancing your technical and professional skills.

Education

Vellore Institute of Technology 10-08-21 - 26-06-25
B.Tech (Computer Science) Vellore, Tamil Nadu

Vellore Institute of Technology (VIT) Vellore is one of India's premier private universities, known for its excellence in education, research, and innovation. The Computer Science program at VIT Vellore is renowned for its rigorous curriculum, state-of-the-art facilities, and emphasis on practical learning. The program aims to equip students with a strong foundation in computer science principles, programming languages, and modern technologies.

Vidya Mandir School 23-05-19 - 12-04-21
High School (Science) New Delhi

Vidya Mandir School is a prestigious educational institution known for its academic excellence and holistic development of students. Established with a mission to provide quality education, the school offers a nurturing environment that fosters intellectual, emotional, and social growth. The Science stream at Vidya Mandir School is designed to provide students with a strong foundation in scientific principles and practical knowledge. The curriculum is aimed at preparing students for higher education and careers in science and technology fields.

Figure 19 Final generated resume

VIII. Verification Email

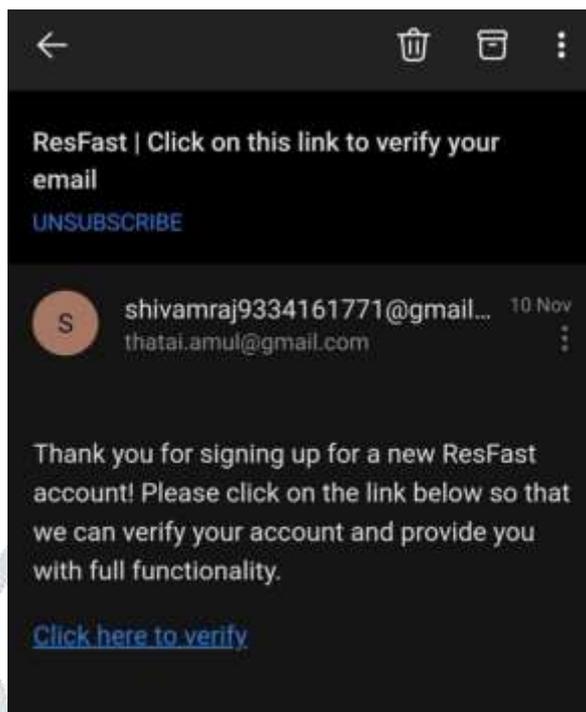


Figure 19 Verify email screenshot

IX. Conclusion

The online resume builder is one of the most fantastic systems for the people who are either freshers in their domain or if they don't have enough idea about the resume or don't have enough time to create the resume of good designs or patterns, then this platform is a very productive place for them

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- [5] <https://www.ijsr.net/conf/RISE2017/IJSR15.pdf>