

Resume Builder Application Documentation

Overview

The Resume Builder application is a web-based tool that allows users to create, edit, and preview their resumes. It offers a user-friendly interface for inputting resume details, supports drag-and-drop reordering of sections, and includes functionality to save resume data to local storage and generate a PDF version.

Requirements

Two Layouts:

- **Editor Layout:** On the left side, where users can fill in their resume details.
- **Preview Layout:** On the right side, where users can see a live preview of their resume.

State Management:

- Use TanStack Store for managing the state of the application.

Save and Restore Functionality:

- A “Save” button at the top to store resume data in local storage.
- On revisiting the website, the application should restore data from local storage to the editor fields and update the preview accordingly.

Drag and Drop Reordering:

- Ability to reorder sections (Work Experience, Education, Skills, Awards, and Volunteering) using drag-and-drop functionality.

PDF Export:

- A button to generate a PDF of the resume in A4 page size using html2pdf.js.

Sections and Fields

Basic Information Section:

- **Name:** Input field for the user’s full name.
- **Contact Information:** Fields for phone number, email, and location.
- **Professional Title:** Input field for the user’s current job title or desired position.

Work Experience Section:

- **Company Name:** Input field for the name of the company.
- **Job Title:** Input field for the user’s job title.
- **Start and End Dates:** Date pickers for the start and end dates of employment.
- **Job Description:** Text area or rich text editor for describing job responsibilities and achievements.
- **Current Job Indicator:** Checkbox or switch to indicate if the user is currently working at the job.
- **Drag and Drop Reordering:** Ability to reorder work experience using drag-and-drop functionality.

Education Section:

- **Institution Name:** Input field for the name of the educational institution.
- **Degree:** Input field for the degree or certification obtained.
- **Field of Study:** Input field for the field of study.
- **Start and End Dates:** Date pickers for the start and end dates of education.
- **Current Study Indicator:** Checkbox or switch to indicate if the user is currently studying.
- **Drag and Drop Reordering:** Ability to reorder using drag-and-drop functionality.

Skills Section:

- **Skill Name:** Input field for the name of the skill.
- **Proficiency Level:** Option to add a proficiency level (e.g., beginner, intermediate, expert) if applicable.
- **Drag and Drop Reordering:** Ability to reorder skills using drag-and-drop functionality.

Summary or Objective Section:

- **Summary:** Text area or rich text editor for a brief summary or career objective.

Awards and Achievements Section:

- **Award Title:** Input field for the title of the award or achievement.
- **Awarder:** Input field for the name of the awarding body or organization.
- **Date:** Date picker for the date the award was received.
- **Description:** Text area or rich text editor for describing the award or achievement.
- **Drag and Drop Reordering:** Ability to reorder using drag-and-drop functionality.

Volunteering Section:

- **Organization Name:** Input field for the name of the organization.
- **Role:** Input field for the user’s role or position.
- **Start and End Dates:** Date pickers for the start and end dates of the volunteering experience.
- **Description:** Text area or rich text editor for describing the volunteering experience.
- **Current Volunteering Indicator:** Checkbox or switch to indicate if the user is currently volunteering.

Additional Features

Template Selection:

- Ability to choose from multiple resume templates.
- Preview of the selected template.

Export and Import Functionality:

- **Export to PDF:** Option to export the resume as a PDF file.
- **Export to JSON:** Option to export the resume data as a JSON file.
- **Import from JSON:** Option to import resume data from a JSON file.

Error Handling:

- Error boundaries to catch and display errors gracefully.

Responsive Design:

- Ensure the resume builder is usable on both mobile and desktop devices.

User Feedback:

- Toast notifications for actions such as saving, exporting, and importing data.

Project Structure

```
resume-builder/  
├── node_modules/  
├── public/  
│   └── index.html  
├── src/  
│   ├── components/  
│   │   ├── BasicInformation.jsx  
│   │   ├── WorkExperience.jsx  
│   │   ├── Education.jsx  
│   │   ├── Skills.jsx  
│   │   ├── Summary.jsx  
│   │   ├── Awards.jsx  
│   │   ├── Volunteering.jsx  
│   │   ├── TemplateSelection.jsx  
│   │   ├── EditorLayout.jsx  
│   │   ├── PreviewLayout.jsx  
│   │   ├── SaveButton.jsx  
│   │   └── ErrorBoundary.jsx  
│   ├── store/  
│   │   ├── index.jsx  
│   │   └── resumeStore.js  
│   ├── pages/  
│   │   ├── index.jsx  
│   │   ├── App.jsx  
│   │   └── EditorPage.jsx  
│   ├── utils/  
│   │   ├── localStorage.js  
│   │   └── pdfExport.js  
│   └── styles/  
│       └── index.css  
├── .gitignore  
├── package.json  
├── tailwind.config.js  
├── vite.config.js  
└── README.md
```

Explanation of Key Files

- **components/BasicInformation.jsx:** Input fields for user’s full name, contact information, and professional title.
- **components/WorkExperience.jsx:** Input fields for company name, job title, start and end dates, job description, and current job indicator. Includes drag-and-drop reordering.
- **components/Education.jsx:** Input fields for institution name, degree, field of study, start and end dates, and current study indicator. Includes drag-and-drop reordering.
- **components/Skills.jsx:** Input fields for skill name and proficiency level. Includes drag-and-drop reordering.
- **components/Summary.jsx:** Text area for summary or career objective.
- **components/Awards.jsx:** Input fields for award title, awarder, date, and description. Includes drag-and-drop reordering.
- **components/Volunteering.jsx:** Input fields for organization name, role, start and end dates, and description. Includes drag-and-drop reordering.
- **components/TemplateSelection.jsx:** Options for selecting resume templates.
- **components/EditorLayout.jsx:** Combines all the editor sections and provides the layout for the editor.
- **components/PreviewLayout.jsx:** Displays the preview of the resume based on the data from the editor.
- **components/SaveButton.jsx:** Button to save the resume data to local storage and generate a PDF.
- **components/ErrorBoundary.jsx:** Component to catch and display errors gracefully.
- **store/index.jsx:** Entry point for TanStack Store.
- **store/resumeStore.js:** Defines the state and actions for managing resume data.
- **pages/index.jsx:** Entry point for the React app.
- **pages/App.jsx:** Main App component that includes routing and layout structure.
- **pages/EditorPage.jsx:** Main page for the resume editor, includes both the editor and preview layouts.
- **utils/localStorage.js:** Utility functions for saving to and loading from local storage.
- **utils/pdfExport.js:** Utility functions for exporting resume to PDF.
- **styles/index.css:** Main CSS file for global styles.

Getting Started

1. Clone the repository:

```
git clone <repository-url>  
cd resume-builder
```

2. **Install dependencies:**

```
npm install
```

3. **Start the development server:**

```
npm run dev
```

4. **Open the application:** Navigate to `http://localhost:3000/` in your browser.

Summary

The Resume Builder application provides a comprehensive solution for creating, editing, and previewing resumes. It includes features such as drag-and-drop reordering, PDF export, and local storage for saving and restoring resume data. The application is built using React, TanStack Store, and Tailwind CSS, ensuring a modern and responsive design.