**Technologies to Use**

**Frontend Development (User Interface)**

1. **React.js / Angular / Vue.js**: For creating a responsive and dynamic user interface.
2. **HTML, CSS, JavaScript**: Core web technologies for basic structure, styling, and interactivity.
3. **Bootstrap / Tailwind CSS**: For designing a user-friendly and modern UI quickly.
4. **React Query / Axios**: For managing API requests to the backend.

**Backend Development (Data Handling and Logic)**

1. **Node.js with Express**: Lightweight and efficient for building APIs.
2. **Python with Django / Flask**: Alternative frameworks for server-side development.
3. **Ruby on Rails**: For rapid application development.
4. **Spring Boot (Java)**: If you prefer Java-based solutions.

**Database (Data Storage)**

1. **MongoDB**: For storing user data in a NoSQL format, which is flexible and scalable.
2. **PostgreSQL / MySQL**: For structured and relational data storage.
3. **Firebase Realtime Database**: For quick prototyping with real-time data.

**Resume Generation**

1. **PDF Generation Libraries**:
   * **jsPDF**: For creating and downloading PDF files directly from the frontend.
   * **pdf-lib**: For manipulating PDF content dynamically.
   * **Puppeteer**: For converting HTML templates to PDFs.
2. **HTML-to-PDF Converters**:
   * **wkhtmltopdf** (backend-based solution).
   * **HTML Canvas Libraries**: For advanced custom resume formatting.

**Cloud Storage (Optional)**

1. **AWS S3 / Google Cloud Storage**: To store and retrieve user data or generated resumes.
2. **Firebase Storage**: For simple integration with a Firebase-based backend.

**User Authentication**

1. **OAuth2 / OpenID Connect**: For social login (e.g., Google, Facebook).
2. **Firebase Authentication**: Easy-to-use and integrates well with Firebase services.
3. **JWT (JSON Web Tokens)**: For secure user authentication in a custom backend.

**Hosting Platforms**

1. **Frontend**:
   * **Netlify / Vercel**: For deploying the frontend.
   * **GitHub Pages**: For hosting static sites.
2. **Backend**:
   * **Heroku / AWS EC2 / Render**: For deploying backend services.
   * **Firebase Functions**: For serverless backend development.

**Development Workflow**

1. **Frontend**: Build forms for user input (e.g., Education, Skills, Projects) and provide a preview of the resume in different templates.
2. **Backend**: Create APIs to save and retrieve user data. Optionally, implement user login and profile management.
3. **Resume Generation**: Use HTML templates styled with CSS for the resume. Convert the templates to PDF using a library like jsPDF.
4. **File Download**: Allow users to download the resume by triggering the jsPDF.save() method or backend-generated PDF response.
5. **Template Selector**: Implement a template gallery in the UI with previews for users to choose from.
6. **Testing**: Test across devices and browsers for compatibility and ensure file downloads work as expected.

**Key elements of resume**

**Personal Information**

Name Current and Permanent address (may be omitted from a resume posted on the web)  
Telephone number  
E-mail address

**Objective**

In one short sentence summarize your goal for your job search.  
The goal statement should be related to the specific position for which you are applying. It is also effective to highlight your skills in the goal statement.  
  
Examples:  
Seeking a position as a social worker providing service to the aged.  
Seeking a position that utilizes my skills in counseling, research, and proposal writing.

**Education**

High school name  
City and State  
Date of graduation  
Course Highlights (courses directly related to the job or your career field and special abilities)  
Certificates

**Work and Related Experience**

Summer jobs, Internships, Volunteer work  
(Include position title, company/organization, city/state, dates and a brief list of the job duties)

**Awards and Honors**

Academic, musical, athletic and or other recognition. (Include name of the award/honor, who awarded it, and when it was awarded.)

**Activities/Hobbies**

Include your role in the position, the organization and dates.

Example:  
Captain, Shorewood High School, Volley Ball Team, 1999 2001

**Skills**

Soft skills: (being responsible, loyal, hardworking, energetic, outgoing.)  
Hard skills: (research and writing, Microsoft word 98, Microsoft Publisher 2000, Public speaking.)

**References (3-5 people)**

Teacher/Professor  
Work supervisor (current or past)  
Character reference (Pastor, Headmaster, youth group leader or someone who knows you well)  
Include the name, relationship to you, organization, contact phone numbers.

**Other Considerations**

Limit your resume to one or two pages.  
Do not include birth date, health status or social security number.  
Limit the use of personal pronouns such as "I”. Begin sentences with action verbs.  
Be honest but avoid writing anything negative in your resume.  
Make your resume error free. Have someone proof read it for you.  
Use a simple, easy to read font style, 10-14 point.  
Use high quality paper.