

Dependencies:

Front End:

- React
- Axios
- JS-cookie

Back End:

- Mongoose
- Express
- Node
- Cors
- Bcrypt

Database:

- MongoDB Atlas

The assumption is that the user will be on a web browser across any device.

High-Level Description of Classes:

Class Name: LandingPage	
Parent Class (if any): N/A	Subclasses (if any): N/A
Responsibilities: <ul style="list-style-type: none">• Display the landing page for the applications.• Provide navigation to signup or login	
Collaborators: <ul style="list-style-type: none">• <code>useNavigate</code> from <code>react-router-dom</code> for navigation.	

Class Name: SignupPage	
Parent Class (if any): N/A	Subclasses (if any): ApplicantSignupPage, RecruiterSignupPage
Responsibilities: <ul style="list-style-type: none">• Render signup page.• Handles signup form submission.	
Collaborators: <ul style="list-style-type: none">• <code>UserContext</code> for user data and authentication.• <code>UserController</code> for backend API interactions.	

Class Name: ApplicantSignupPage	
Parent Class (if any): SignupPage	Subclasses (if any): N/A
Responsibilities: <ul style="list-style-type: none"> • Render signup page specifically for job-seekers. • Handles signup form submission for job-seekers. 	
Collaborators: <ul style="list-style-type: none"> • <code>SignupPage</code> for common signup functionality. • <code>UserContext</code> for user data and authentication. • <code>useNavigate</code> from <code>react-router-dom</code> for navigation. 	

Class Name: RecruiterSignupPage	
Parent Class (if any): SignupPage	Subclasses (if any): N/A
Responsibilities: <ul style="list-style-type: none"> • Store recruiter information in the database 	
Collaborators: <ul style="list-style-type: none"> • <code>SignupPage</code> for common signup functionality. 	

Class Name: LoginPage	
Parent Class (if any): N/A	Subclasses (if any): N/A
Responsibilities: <ul style="list-style-type: none"> • Render the login page for the application. • Navigate to the appropriate dashboard based on the user role. 	
Collaborators: <ul style="list-style-type: none"> • <code>useNavigate</code> from <code>react-router-dom</code> for navigation. • <code>UserContext</code> for user data and authentication. • <code>UserController</code> for backend API interactions to authenticate the user. • <code>Link</code> from <code>react-router-dom</code> for navigation to signup pages. 	

Class Name: Dashboard	
Parent Class (if any): N/A	Subclasses (if any): ApplicantDashboard, RecruiterDashboard
Responsibilities: <ul style="list-style-type: none"> • Display the user's dashboard with relevant information and options 	

- Allow the user to update their profile information
- Provide access to job search or posting functionalities

Collaborators:

- `UserContext` for user data and authentication.
- `useNavigate` from `react-router-dom` for navigation.
- `useState`, `UseContext`, and `UseEffect` from `"react"`
- `Modal` from `"./Modal"`
- `FaStar` from `"./react-icons/fa"`

Class Name: ApplicantDashboard

Parent Class (if any): Dashboard

Subclasses (if any): N/A

Responsibilities:

- Display applicant-specific information (e.g. saved job listings, application status)
- Allow the applicant to update their resume

Collaborators:

- `React` from `"react"`
- `fetchFavoritedJobs`, `fetchJobsForRecruiter` from `"./Dashboard"`

Class Name: RecruiterDashboard

Parent Class (if any): Dashboard

Subclasses (if any): N/A

Responsibilities:

- Display recruiter-specific information (e.g. posted job listings, applicant profiles)
- Allow the recruiter to update their or job postings
- Provide access to applicant search functionalities

Collaborators:

- `React` from `"react"`
- `fetchFavoritedJobs`, `fetchJobsForRecruiter` from `"./Dashboard"`

Class Name: UserInformation	
Parent Class (if any): N/A	Subclasses (if any): N/A
Responsibilities: <ul style="list-style-type: none"> • Store and manage user information (e.g. username, email) • Provide methods for updating user information 	
Collaborators: <ul style="list-style-type: none"> • <code>UserContext</code> for user data and authentication. • <code>useNavigate</code> from <code>react-router-dom</code> for navigation. • <code>useState</code>, <code>UseContext</code>, and <code>UseEffect</code> from “<code>react</code>” 	

Class Name: ApplicantList	
Parent Class (if any): N/A	Subclasses (if any): N/A
Responsibilities: <ul style="list-style-type: none"> • Fetch and display a list of applicants for a specific job. • Display job details for a specific job. • Filter applicants based on a search term. • Handle applicant favoriting. • Display details and resume of the selected applicant. 	
Collaborators: <ul style="list-style-type: none"> • <code>useParams</code> and <code>useNavigate</code> from <code>react-router-dom</code> for navigation. • <code>UserContext</code> for user data and authentication. • <code>DashboardController</code> for backend API interactions to fetch applicants and job details. • <code>FaStar</code> from <code>react-icons</code> for the favorite icon. 	

Class Name: Modal	
Parent Class (if any): N/A	Subclasses (if any): N/A
Responsibilities: <ul style="list-style-type: none"> • Display a modal window with the provided content. • Handle the visibility of the modal based on the <code>show</code> prop. 	
Collaborators: N/A	

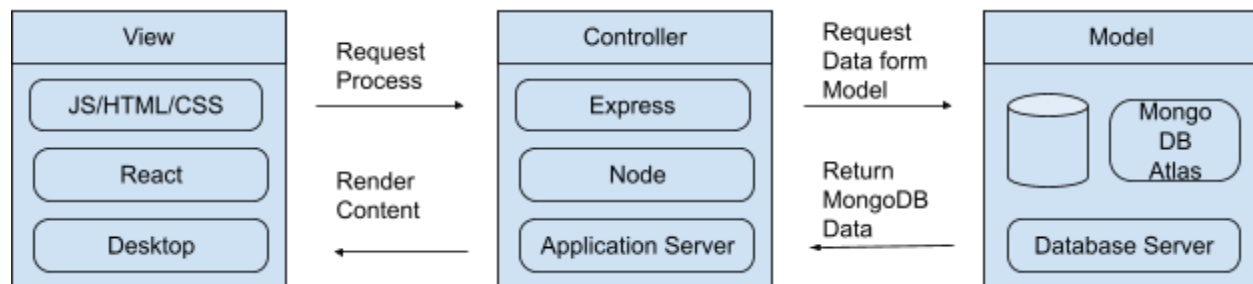
Class Name: NavBar	
Parent Class (if any): N/A	Subclasses (if any): N/A
Responsibilities: <ul style="list-style-type: none"> • Render the navigation bar for the application. • Display different navigation links based on user authentication status and role. • Handle user logout and navigate to the home page. 	
Collaborators: <ul style="list-style-type: none"> • <code>Link</code> from <code>react-router-dom</code> for navigation links. • <code>useNavigate</code> from <code>react-router-dom</code> for programmatic navigation. • <code>useLocation</code> from <code>react-router-dom</code> for determining the current route. • <code>UserContext</code> for accessing user data and authentication functions. 	

Class Name: UserContext	
Parent Class (if any): N/A	Subclasses (if any): N/A
Responsibilities: <ul style="list-style-type: none"> • Manage user state • Provide functions to login, signup, update, and logout user • Persist user state in cookies 	
Collaborators: <ul style="list-style-type: none"> • <code>React</code> from <code>"react"</code> • <code>UserContext</code> for user data and authentication. • <code>UserController</code> for backend API interactions. • <code>Cookies</code> from <code>"js-cookie"</code>. 	

Class Name: DashboardController	
Parent Class (if any): N/A	Subclasses (if any): N/A
Responsibilities: <ul style="list-style-type: none"> • Fetch all jobs • Handle job posting, editing, deleting, and applying • Handle favouriting of jobs 	
Collaborators: <ul style="list-style-type: none"> • <code>axios</code> from <code>"axios"</code>. 	

Class Name: UserController	
Parent Class (if any): N/A	Subclasses (if any): N/A
Responsibilities: <ul style="list-style-type: none"> • Login user • Signup User • Update User information 	
Collaborators: <ul style="list-style-type: none"> • N/A 	

System Architecture:



State Diagram:

