

# System Design Document

Steadfast Solutions

October 8, 2021

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# 1 CRC Cards

## 1.1 App

CRC card:

**Parent class:** N/A

**Subclasses:** SignInCallback, SignIn, SignUp, Search, Welcome

**Collaborators:** Navbar

**Responsibilities:**

Handles routing to the requisite subclasses, which receive routing information from App, and creates base pages.

## 1.2 SignUp

CRC card:

**Parent class:** App

**Subclasses:** N/A

**Collaborators:** AuthProvider, AlertMessage, PillButton, Spacer, SubmitButton, TextInput

**Responsibilities:**

Signs up users who provide their information.

## 1.3 SignIn

CRC card:

**Parent class:** App

**Subclasses:** N/A

**Collaborators:** AuthProvider, AlertMessage, PillButton, Spacer, SubmitButton, TextInput

**Responsibilities:**

Signs in users who bear correct credentials.

## 1.4 SignInCallback

CRC card:

**Parent class:** App

**Subclasses:** N/A

**Collaborators:** AuthProvider

**Responsibilities:**

Signs in users who are returning from an external authentication provider.

## 1.5 AuthProvider

CRC card:

**Parent class:** N/A

**Subclasses:** N/A

**Collaborators:** React.Context

**Responsibilities:**

Provides authentication interface for other classes.

## 1.6 AlertMessage

CRC card:

**Parent class:** N/A

**Subclasses:** N/A

**Collaborators:** N/A

**Responsibilities:**

Provides alert messages for the UI.

## 1.7 Navbar

CRC card:

**Parent class:** N/A

**Subclasses:** N/A

**Collaborators:** AuthProvider

**Responsibilities:**

Provides navigation bar component for UI.

## 1.8 AlertMessage

CRC card:

**Parent class:** N/A

**Subclasses:** N/A

**Collaborators:** N/A

**Responsibilities:**

Provides alert messages for the UI.

## 1.9 PillButton

CRC card:

**Parent class:** N/A

**Subclasses:** N/A

**Collaborators:** N/A

**Responsibilities:**

Provides a standard button for UI.

## 1.10 Spacer

CRC card:

**Parent class:** N/A

**Subclasses:** N/A

**Collaborators:** N/A

**Responsibilities:**

Provides a standard spacing utility for UI.

### 1.11 SubmitButton

CRC card:

**Parent class:** N/A

**Subclasses:** N/A

**Collaborators:** N/A

**Responsibilities:**

Renders a submission button with multiple states (active, pending, success).

### 1.12 TextInput

CRC card:

**Parent class:** N/A

**Subclasses:** N/A

**Collaborators:** N/A

**Responsibilities:**

Provides a styled text input for UI.

### 1.13 Joblisting

**Parent class:** N/A

**Subclasses:** N/A

**Collaborators:** N/A

**Responsibilities:**

Stores information data about individual job listings.

### 1.14 JobseekerProfile

**Parent class:** N/A

**Subclasses:** N/A

**Collaborators:** N/A

**Responsibilities:**

Stores information data about individual user profiles that are job seekers.

### 1.15 User

**Parent class:** N/A

**Subclasses:** N/A

**Collaborators:** N/A

**Responsibilities:**

Stores login and authentication details of all users.

### 1.16 SearchBar

**Parent class:** N/A

**Subclasses:** N/A

**Collaborators:** JobseekerProfile, AuthContext

**Responsibilities:**

1. Sends parameters to current page about location and keywords.
2. Send location and keyword parameters based on current user profile.

### 1.17 Search

**Parent class:** App

**Subclasses:** N/A

**Collaborators:** JobseekerProfile, AuthContext, SearchBar, Job-listing

**Responsibilities:**

1. View list from filtered search results of all job listings.

### 1.18 Resume API

**Parent class:** resumeController.js

**Subclasses:** N/A

**Collaborators:** JobseekerProfile

**Responsibilities:**

Allows users to upload a PDF resume in their profile.

### 1.19 Job Seeker

**Parent class:** N/A

**Subclasses:** N/A

**Collaborators:** N/A

**Responsibilities:**

An object representing a job seeker, which stores identifying information and job specific data like skills and education. It contains a field that ties itself to a User object.

### 1.20 ElevatorPitch

**Parent Class:** N/A

**Collaborators:** Section

**Responsibilities:**

When clicked, the user's elevator pitch will play in a popup.

## 1.21 Profile

**Parent Class:** N/A

**Collaborators:** Section

**Responsibilities:**

Contains contact information about the user like name, phone number, etc.

## 1.22 Skills

**Parent Class:** N/A

**Collaborators:** Section

**Responsibilities:**

Displays any skills the user wants to showcase. Users can also delete and add skills here.

## 1.23 Summary

**Parent Class:** N/A

**Collaborators:** Section

**Responsibilities:**

Quick summary of a user. Users can also update their profile summary as necessary.

## 1.24 WorkExperiences

**Parent Class:** N/A

**Collaborators:** Section

**Responsibilities:**

Displays any work experiences the user wants to showcase. Users can also delete and add work experiences here.

## 1.25 Section

**Parent Class:** N/A

**Collaborators:** None

**Responsibilities:**

Section template for profile page.

## 1.26 ProfilePage

**Parent Class:** N/A

**Collaborators:** Profile, ElevatorPitch, Summary, Skills, WorkExperiences

**Responsibilities:**

Displays profile page.

## 1.27 Job Listing UI

**Parent Class:** Search

**Collaborators:** Joblisting, Job

**Responsibilities:**

Displays information about listings, displays a second card that shows more details depending on state.

## 1.28 Job

**Parent Class:** Job Listing UI

**Collaborators:** Joblisting

**Responsibilities:** Displays information about specific listing, change state in Parent when clicked on.

## 1.29 Job Listing API

**Parent class:** jobListingController.js

**Subclasses:** N/A

**Collaborators:** server.js

**Responsibilities:**

Allows recruiters to create job listings. Job details from create jobs form are parsed and passed into the various methods in the API.

## 1.30 Recruiter Profile

**Parent class:** RecruiterProfile.js

**Subclasses:** N/A

**Collaborators:** N/A

**Responsibilities:**

Mongoose model to store recruiter profile information.

## 1.31 Application UI

**Parent class:** N/A

**Subclasses:** N/A

**Collaborators:** JobListing UI

**Responsibilities:**

Allow users to apply to jobs

## 1.32 Application Model

**Parent class:** Application.js

**Subclasses:** N/A

**Collaborators:** N/A

**Responsibilities:**

Mongoose model to store application information



### **1.33 Applied Jobs UI**

**Parent class:** N/A

**Subclasses:** N/A

**Collaborators:** Job Listing UI

**Responsibilities:**

Display to the user what jobs they have already applied to

### **1.34 Search Profiles Page**

**Parent class:** N/A

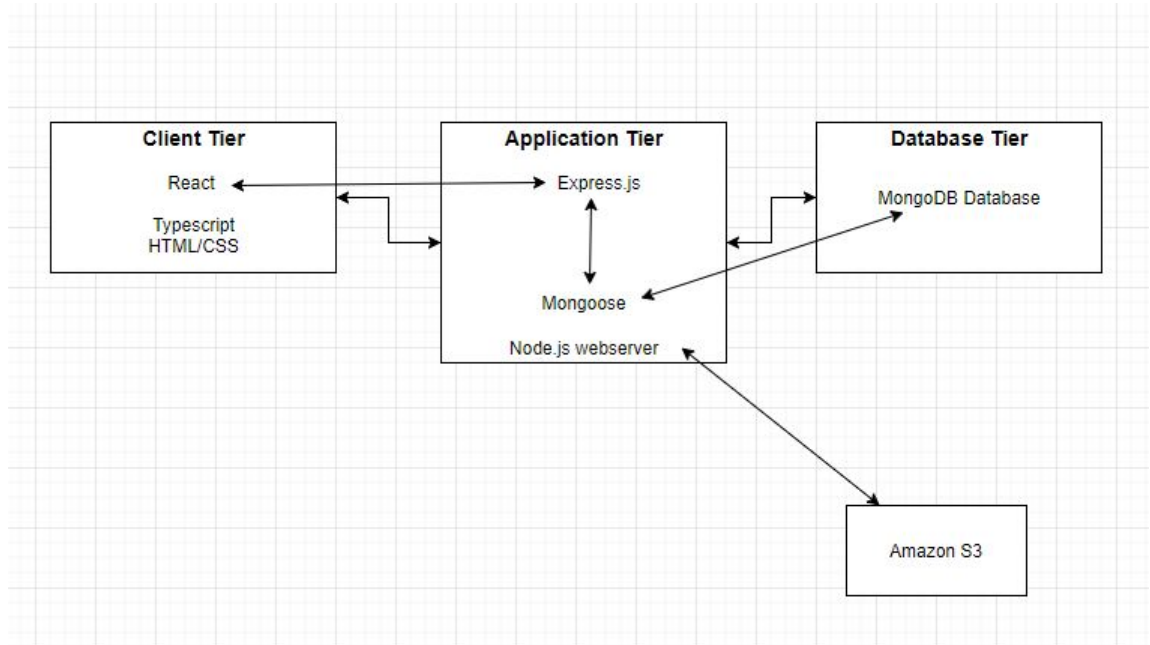
**Subclasses:** N/A

**Collaborators:** Jobseekerprofile

**Responsibilities:**

Displays the information about all the job seekers

## 2 Software Architecture Diagram



**Figure 1:** The EasyApply web app uses a 3-tier architecture. The tiers are Client, Server, and Database  
Reference: <https://levelup.gitconnected.com/a-complete-guide-build-a-scalable-3-tier-architecture-with-mern-stack-es6-ca129d7df805>