System Design Document

Steadfast Solutions

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Contents

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, Joblisting
   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.
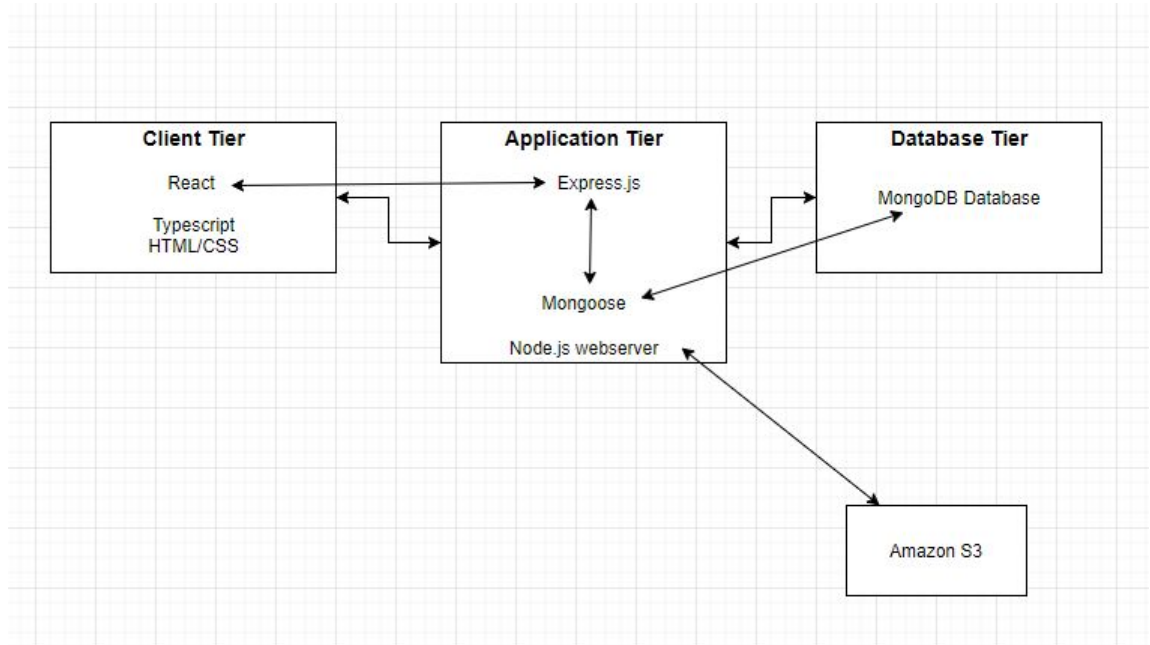
2   Software Architecture Diagram

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