

# Handy Software Engineer Technical Exercise

### Overview

In order to <u>guarantee</u> a high quality of service for our customers, Handy <u>vetts</u> every professional to ensure they are qualified for the services they wish to perform through the Handy platform. A critical piece of the vetting process is a multiple choice quiz that we use to determine if professionals are qualified to do their jobs well.

For this exercise we would like you to implement a quiz workflow that allows candidates to sign up to be a Handy professional and select what type of service they would like to perform. Based on their selected service, the application should present a set of multiple choice questions that are specific to that service. The answers should be stored in a database along with the candidate's overall score so they can be reviewed by our operations team before continuing with the candidate's application.

# **Functional Requirements**

#### Candidate Users

- A candidate can sign up with their email, name and service preference
  - A candidate is uniquely identified by their email address
  - The candidate can select between Handyman and Home Cleaning services
  - A candidate cannot change their service preference or their answers once they have been submitted
- The system will display a set of multiple choice questions to the candidate based on their selected service
  - Each question has one and only one correct answer
  - The UI is responsive and can be easily used on a computer, tablet, or phone
- A candidate can select one answer for each question and submit their answers upon completion of the guiz
  - All questions are required



#### Admin Users

- An admin user can create/view/edit the questions and the possible answers
  - A UI to support these actions is not required at this time but the implementation should support the addition of an administrative front-end at a later date
- An admin user can view the results for each candidate, including their specific answers to each question as well as their total score
  - For the purposes of this exercise this page can be unauthenticated. You do not need to create an "admin" user construct to restrict access to the page.
- An admin user can view the percentile rank of candidates based on their total score.
  - Display a basic list of each candidate with their name and percentile rank, listed in descending order based on:
    - The candidate's percentile rank (primary sort)
    - Alphabetically by candidate's name (secondary sort)
  - The view should always reflect the most up-to-date view including every candidate who has completed the guiz
  - For the purposes of this exercise this page can be unauthenticated. You do not need to create an "admin" user construct to restrict access to the page.

# **Technical Requirements**

- You are welcome to use any tech stack you prefer, but the application should be runnable by our engineering team
- Your solution should include a README that explains how we can setup and run the application
- Your solution should include sufficient tests to ensure the application functionality is working as expected
- Upon completion of the exercise please email a ZIP/TAR file of your source code and README to your recruiter



## Sample Questions

### Cleaning

- What would you do about cleaning cobwebs and dusting?
  - o Don't clean any cobwebs because that's too detailed, but I do some dusting
  - Don't clean any cobwebs or dust because it takes too long
  - Clean cobwebs I can reach, and dust all surfaces (correct)
- What is the effect of oven cleaner on kitchen countertops?
  - No effect
  - Enhances shine
  - Leaves streak marks
  - Stains surface (correct)
- In what order would you clean these items in the kitchen?
  - Clean the floors; wash the dishes; wipe down the countertops
  - Wash the dishes; wipe down the countertops; clean the floors (correct)
  - Wipe down the countertops; wash the dishes; clean the floors
  - Wash the dishes; clean the floors; wipe down the countertops

### Handyman

- You have a job at 9:00am and realize you won't arrive until 9:20am. You would:
  - Notify the client and Handy as soon as possible and plan to stay overtime (correct)
  - Notify the client and Handy after 9:00am in case you end up arriving by 9:10am
  - o Don't notify anyone since you're only going to be 20 minutes late
- What would you do if you arrive at a job and do not have the necessary tools to complete the required task?
  - Do your best to complete the job with the tools you have
  - Tell the customer you cannot do the job and leave
  - Explain to the customer that you do not have the required tools and ask them to contact Handy to reschedule the booking and add a note regarding what tools are required (correct)
  - Remain at the customers' home for the duration of the booking but do not complete the work