Introduction

This is the requirements and user cases document for the programmer tests application.

People change jobs very frequency. People look for jobs and companies hire people. This happens hundreds and thousand times a day in the world. People want to find a satisfied job and companies wants to hire good and right people.

Test is a common way for companies to find a right skill sets from many candidates. Potential candidates also want to expose the best during the interview process.

Almost all software developer’s hiring involves some kind of test.

This APP is for a test tool. A potential candidate can register the tool to test and test his/her skills before actual interview. Companies can also register the tool, so they can invite the candidates to do the test, so that they can easily screen the candidates before they invite the candidates face to face interview (which is much more expensive and time consuming).

1. User, register and log-in page

A User can sign on the application.

There are three types of user: casual user, regular user and corporation user.

The casual user and regular user are a single user. After they login, the can select a set of tests to do the test

The corporation user is a group user. The user can invite people (who don’t need to sign-in) to do the test. However, the test will be selected by the group user.

2. Payment type

When a user sign on, in principle, he/she should give the payment detail. We may make it optional during the sign-on step.

A simple payment type will be paypal. Credit card payment may be another option but is more complicated.

3. Questions

Questions can be categorized based on difficulty: easy, intermediate and difficult. Also questions can also be categorized based on language: java, C++, general, etc.

Questions can be multiple choice type questions or programme questions.

4. Question selections

For standard user(paid user), they can choose predefined test sets of questions. They can also generate their own set of questions based on difficulty, language and question types and store the question set. For instance, company can do something like that. After the question set is generated, they can invite people to do the test.

The standard user can also practise the questions based on difficulty, language type and question types. Computer will randomly generate a small set of questions for them

Some users may login as trial user, these user can have right to do one or two predefined question sets, or be able to do a couple of practices on the questions.

The each question has a limited time to answer, when the time is passed and the question is not answered, it will move to next question, and the previous question will be treated as incorrect.

Scoring Systems

When the test is done, system will generate a report to user. For standard user, he/she will be able to report.

The report includes total score. For standard user, he/she can also see the full report, which questions are correct, which questions are wrong. For trial user, he/she will not be able to see full report, but total score will be report.

The invited testers will not see the report.

User case

1. Sign up: the first page is introduction page about the app and features of the app. And a button for sign-up and sign-in. For a new user, click on sign-up. A Sign-up page pops-up, A user will need to fill in the personal detail such as name, email,( payment), individual/company and password. The email address will be validated against the system to check if the email address is valid and email has not been registered. If the same email is registered, it will popup the message that says the user has been registered with sign-in button for user to sign in. If not, sign up is done and the validation email will be sent for the user validation. After the user click the validation click sent by email, sign up is complete and, the user can login the app.
2. Sign in: After a user signs up, he/she can use signup info ( email and password) to sign in. After the user is signed in, he/she can do the test. In the sign-in area, there will be link“forgot password”. If you forget your password, you can click the link. It will ask you to type your email to retrieve the your password. An email will be sent to you with your password.
3. Test for multiple choice questions. There are several types of tests. A common one is the multiple choice questions. The test has number of questions (~30 question). Each question is 1 minute to answer. The first page expresses about the test and the form of the test with an example. There are is “start” button to start test. As soon as you click “start”, we will start to do the test. One question is a page. After you have done the question, you can click next, it will move to the next question. Each question has a time limit to finish, one minute per question. If you have not done the test within one minute, it will automatically move to the next question.