

Python Web Developer Technical Skills Assessment Exercise

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Background

For this exercise, you will create a two-page web application using Flask and React in Python 3. In this scenario, imagine this application is being used by clinicians to look up patient lab results on three different tests (A, B, and C) on various dates.

We want to assess your Flask, React, Python 3, HTML/CSS, and data manipulation skills using the pandas package. Use pandas release 2 or higher. Please complete all tasks as defined to the best of your ability, as this helps us evaluate your Python Web Developer skills needed for this position.

Your solution must be completely implemented programmatically.

Files

- app.py: the Flask app
- home.html: an empty home page
- search.html: an empty search page
- patient_tb.csv: a table of patient data, stored as comma-separated value file.

Tasks

1. Create a static Home page that includes:
 - a. The title "Lab Results Finder" anywhere at the top of the page
 - b. "a way" to navigate to the Search page

Use React and other web libraries, such as [Bootstrap](#), to develop and augment your page implementations.

Part (b) can be implemented any way you would like (e.g., navigation bar, hyperlink), but it must provide a clear way for a user to navigate to the Search page.

2. Create a form for the Search page where users can type a patient's first name and create a REST API endpoint to return a table of patients that match that first name in patient_tb.csv. Use any data grid you prefer to organize the results returned.

3. Your endpoint must also remove duplicate rows found in patient_tb.csv using pandas in Python, so that only distinct instances are displayed as the search results. For the purposes of this assessment, consider a duplicate record as those row instances where a patient has taken the same test on the same day.

4. Please return your entire solution.