

Python Developer Technical Skills Assessment

CSP Informatics Center, VA Boston Healthcare System

July 2020

Background

For this exercise, you will create a two-page web application using Flask in Python 3. In this scenario, the application is being used by clinicians to look up patient lab results on three different tests (A, B, and C) on various dates. We are looking to assess your Flask, Python 3, HTML/CSS, and data manipulation skills in Pandas. It is okay if you are unable to do every task; we are using this to get a sense of your skill set more broadly, so we only ask that you do it to the best of your ability.

Files

- `app.py`
- `home.html`
- `search.html`
- `patient_tb.csv`

Task

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

You are free to use a framework like [Bootstrap](#) or write your own HTML/CSS to create this page. Component (b) can be implemented any way you would like (e.g., navigation bar, hyperlink), as long as it gets users to the Search page.

2. Create a form for the Search page where users can type a patient's first name and in return it shows the table of patients that match that first name from `patient_tb.csv`.
3. Remove duplicate values from `patient_tb.csv` using the Pandas library in Python. Here, duplicates records refers to instances where a patient has taken the same test on the same day. You are free to implement this however you like, as long as it is being done through code rather than manually removing rows in Excel.

Deliverable

When you are done, please re-zip the `python_dev_exercise` folder and send it back to your screener. The goal should be that the screener will be able to run `app.py` to use the application in a web browser like Chrome.