Interview task

ABC is an AI company and they are daily working with object detection algorithms and AI engineers in that company approached you regarding the creation of one application that will help them to reduce time in their daily work. So, you have to create that application in the following manner.

Frameworks to be used:

Backend: Flask or Django
Database: Any SQL or NoSQL DB
Frontend: You will need to use React JS for developing the frontend of the application. You don't have to worry about the styling of the frontend (Bonus points if you properly style the application) but it should be functional and perfectly integrated with the backend.

Task-1:
Create a component in the frontend where the user will upload the provided csv file (data.csv). After the csv is uploaded, the contents of the csv should be inserted into the database. You should use the pandas library to read the uploaded csv. You have to store the following information from the csv into the database

- image_name
- objects_detected
- timestamp (use the timestamp provided in the csv)

Task-2:
On the same page create 2 input date elements from which the user can select the start date and end date. Now fetch the results between these dates and display them to the user in a table format. The table should consist of the following information: image_name, detections, image (use the images provided in the zip file). Sample application shown below.
Also a report should be generated in the backend application which counts the total number of objects detected between the given date range. Use the python csv module to generate the csv. The sample output report (report.csv) will be provided to you in the zip file.

Upload CSV

Choose File No file chosen Upload

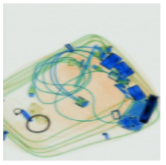
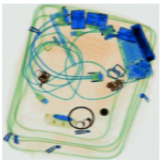
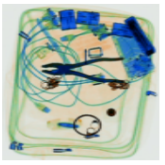
Start Date

10/23/2021

End Date

11/26/2021

Fetch Data and Generate Report

Image Name	Detections	Image
25-10-2021-08-03-10-564119.jpg	lighter,gold,scissor,mobile,knife	
25-10-2021-08-06-55-666701.jpg	lighter,gold,scissor,mobile,knife	
25-10-2021-08-08-29-726686.jpg	lighter,gold,mobile,knife,plier	

Deployment (Bonus points if you complete this step)

Dockerize your app and create docker-compose files for building docker images and running services.

Submission Steps:

Share the link of the GitHub repository and also create a Readme file mentioning steps for running this application, API documentation, and any other information if needed.