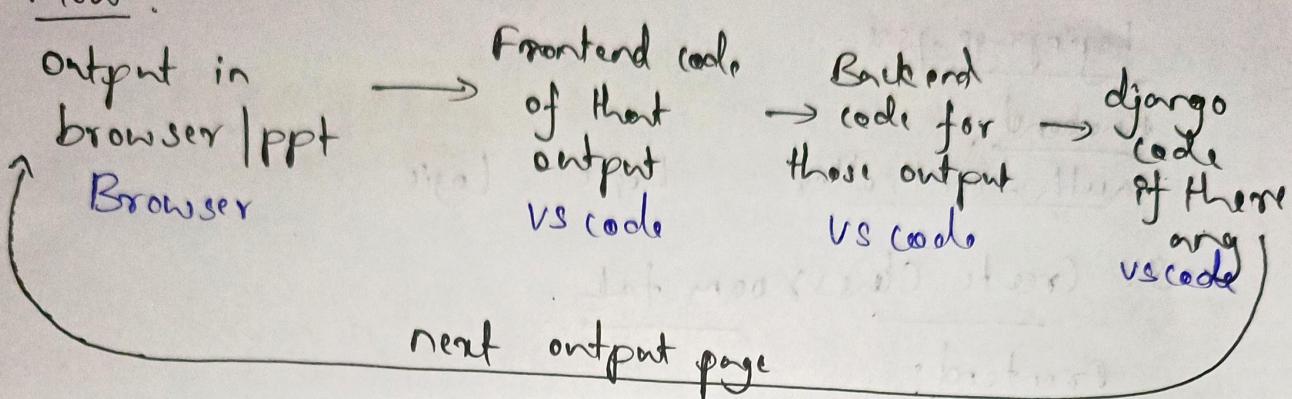


Coding Explanation :

(1)

Flow :



Coding explanation :

1. Home page / tab : (will be displayed) (output)
then moved to vs code

Front end :

App.jsx \Rightarrow starting point of website (tell about routes)
then goto Home.js (this is code for home tab)

Backend : Nothing to explain

2. Register page : tab

Front end :

Register page.jsx : tell about this (glance)

Backend : start from index.js (starting point)
then goto controller/auth-controller.js (glance it)

3. Login Page :

(2)

Frontend :

Loginpage.jsx:

Backend :

auth-controller: Logic Logic

3. Create Classroom tab :

Frontend :

CreateClassroom.jsx:

Backend :

user-controller.jsx: createclassroom (line no 4) ^{function}

4. Your Classroom tab :

Frontend :

YourClassroom.jsx:

Backend :

user-controller.jsx: getclassroom function
(line no. 85)

5. Classroom details page : (When clicked on card on page will be opened)

Frontend :

classRoomDetails.jsx:

Backend: → The below student list and web
are displayed by the help

CreateDataset component

(3)

Note: To create dataset component we pass classId and className as props from this classroom details page.

Components / CreateDataset.js: tell in glance about getting all students of the class and turning on webcam and filling student data and storing images captured in django Backend:

student-controller.js:

Here explain all function in glance
add student, get students, get student enr
(tell about feature no need to explain code if can't)

Django - Backend:

email, name, roll number

AttendanceSystem / app / views.py

line no : 62 → CreateDataset function:

Tell about storing image, and storing data in student.csv file

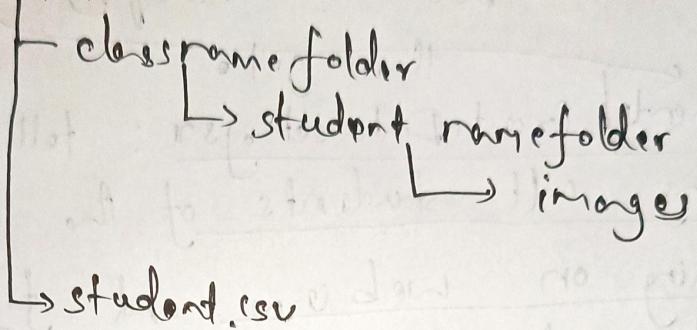
Note: student.csv file is used to get roll-number and email of student to send it as response to frontend (bcz the model predicts only name of the student in front of camera so inorder to get ~~name~~ email id and name)

roll number of predicted student we use this
student.csv file.

(4)

(Images will be stored inside dataset folder)

→ like e.g: dataset



6. Click on Take Attendance in the card

⇒ Take attendance page will be opened

Frontend:

TakeAttendance.jsx:

• Turning on camera and displaying predicted students name and roll number in the side bar.

Backend: → When page is loaded all the students of this class is fetched and is used to create attendance document of that particular date in database.

→ Once document is created next the length of the attendance report (document) in the database for that particular date is fetched to track sessions [length = 1 means only one class]
[length = 2 means two class]

- When webcam is turned on the Train model api is called to train model based on class name. (line no 130) (detect face API)
- The model returns name, email and roll number of student in front of camera.
- Once response is returned from ml model the update report attendance report api is called to update the status of that student as present in the attendance document.
- When user clicks on Take new Attendance function is called which clears student list in the side and creates attendance report for another session on the same day.

Backend:

user-controller.js: explain function createAttendanceReport, getReportLength, updateReport,
line no: 81, 109, 163,

7. Click on view Attendance button on the card

- All Attendance page is opened where all attendance reports of that particular class is mapped with date as filter

Frontend:

ViewAttendancePage.jsx:

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Backend: function getattendance report (User-controller.js) line no = 213 ⑥

8. When clicks on the view button on the date mapped:

⇒ Attendance Report page will be opened which shows attendance of that particular date which is being clicked as table.

(Multiple tables will be displayed if taken more than one session on that day).

Frontend:

AttendanceDetails.jsx:

Backend:

User-controller.js: function getspecific report line no 233