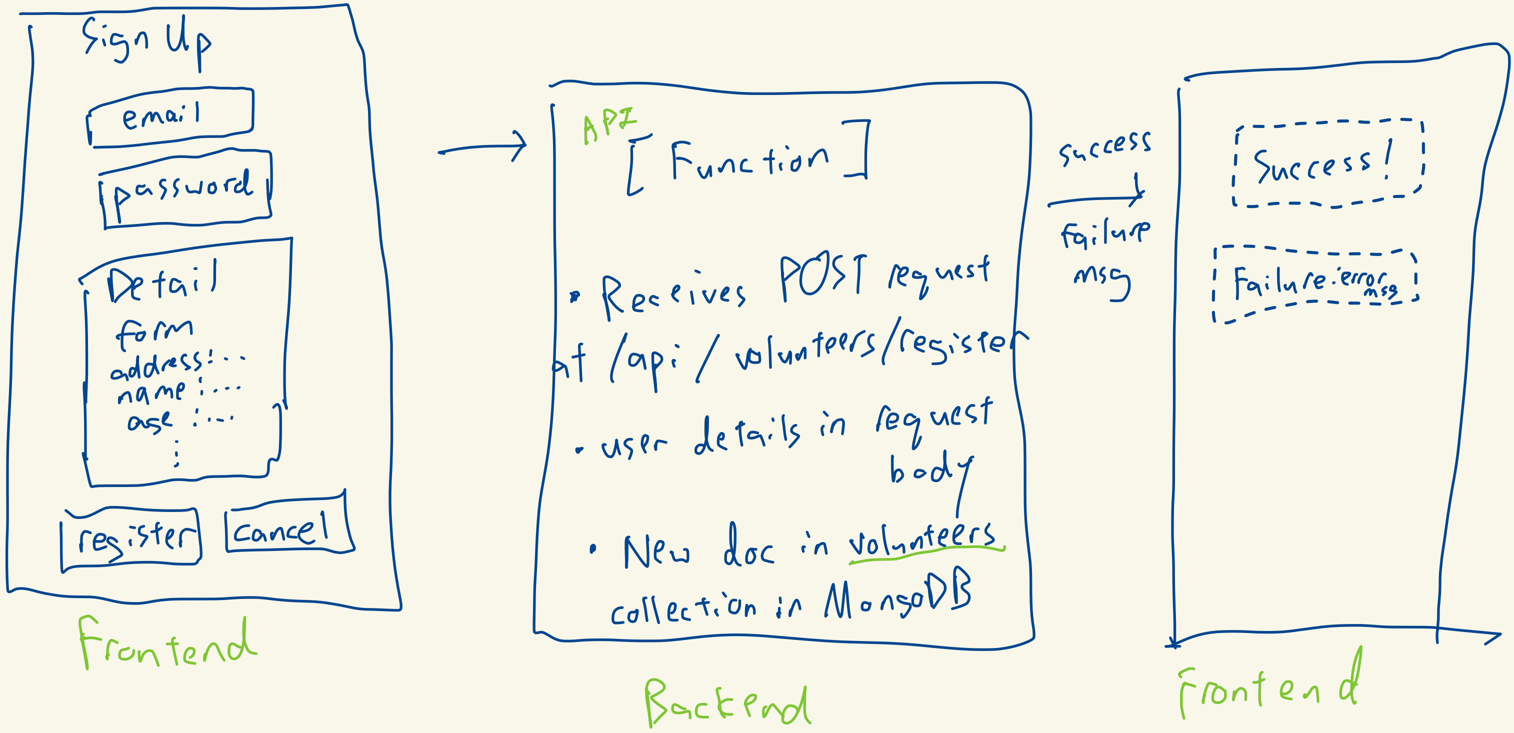
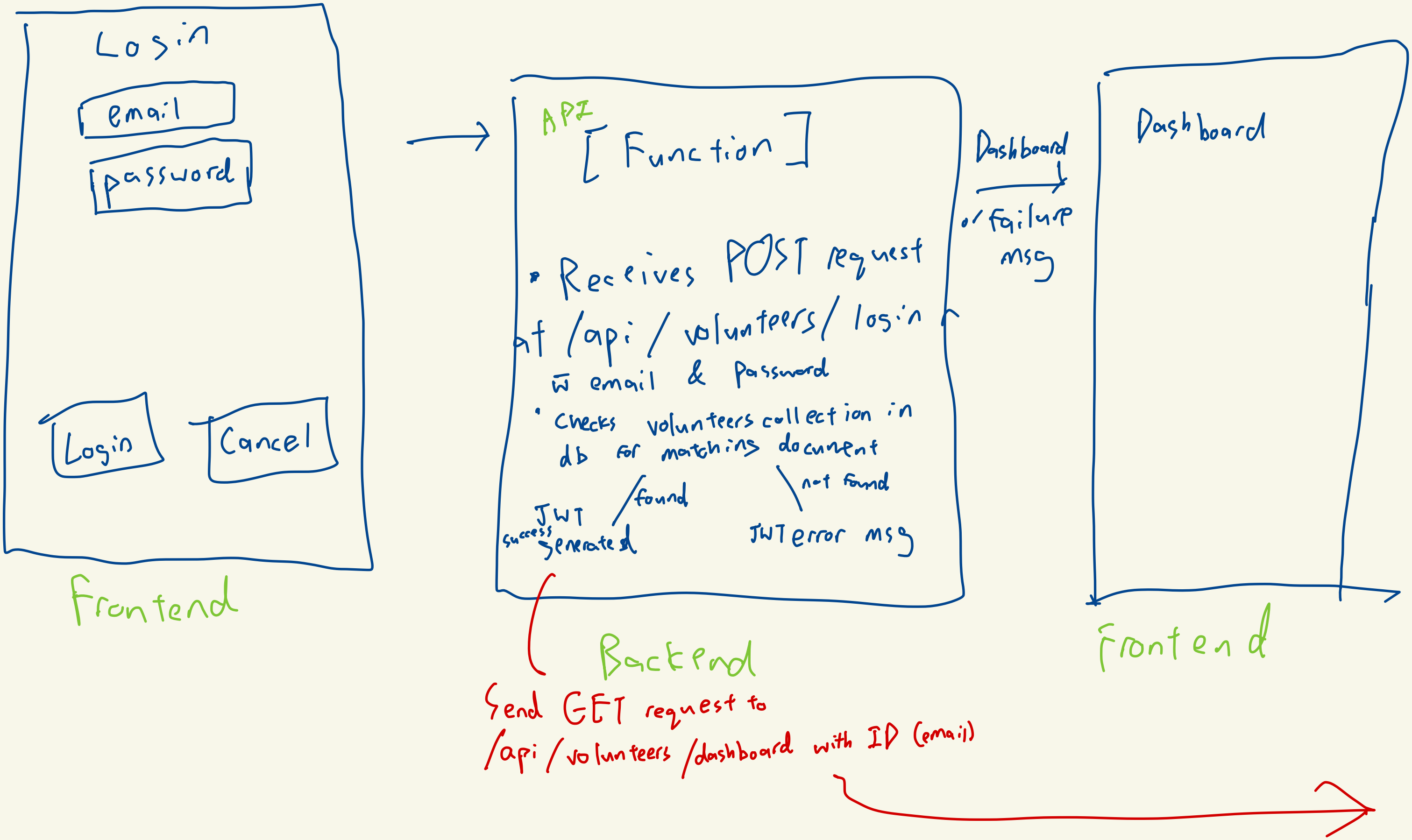
zero-cost db: MongoDB Atlas
backend : Node.js w/ Typescript/Express
frontend : Vue.js / React

1. Volunteer Registration



- Receives POST request at /api/volunteers/register
- user details in request body
- New doc in volunteers collection in MongoDB

2. Volunteer Login



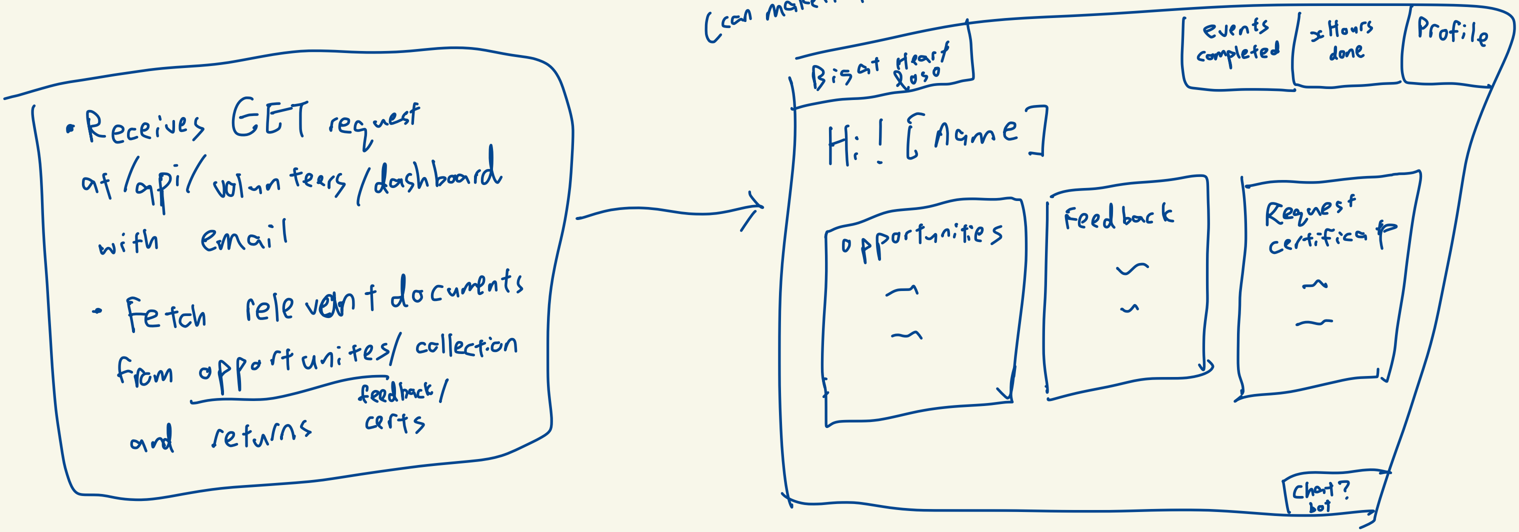
- Receives POST request at /api/volunteers/login w̄ email & password
- Checks volunteers collection in db for matching document

Send GET request to /api/volunteers/dashboard with ID (email)

Dashboard Volunteer

- Opportunities
- Feedback
- Cert request

(can makeit look nicer/add features)

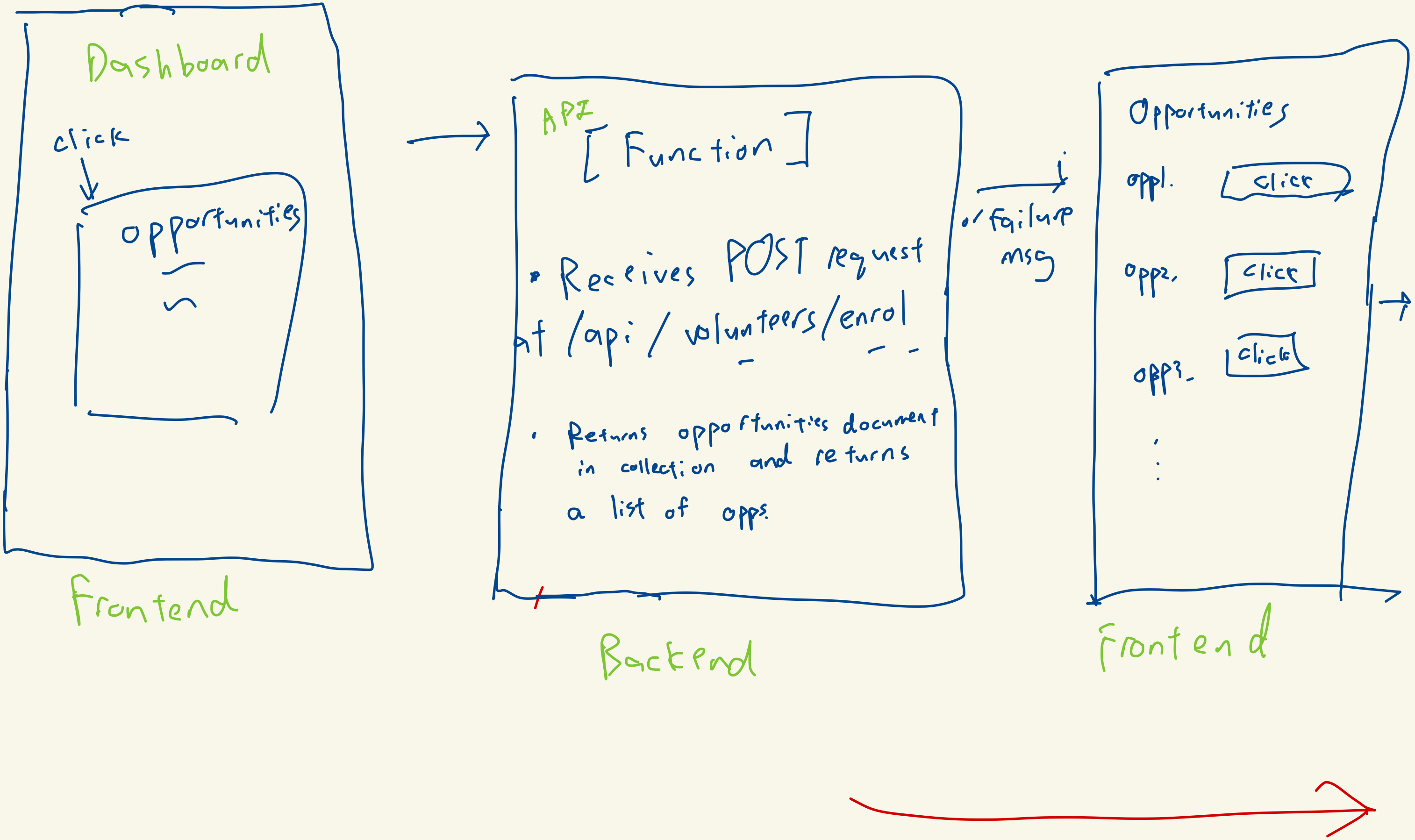


- Receives GET request at /api/volunteers/dashboard with email
- Fetch relevant documents from opportunites/ collection feedback/ certs and returns

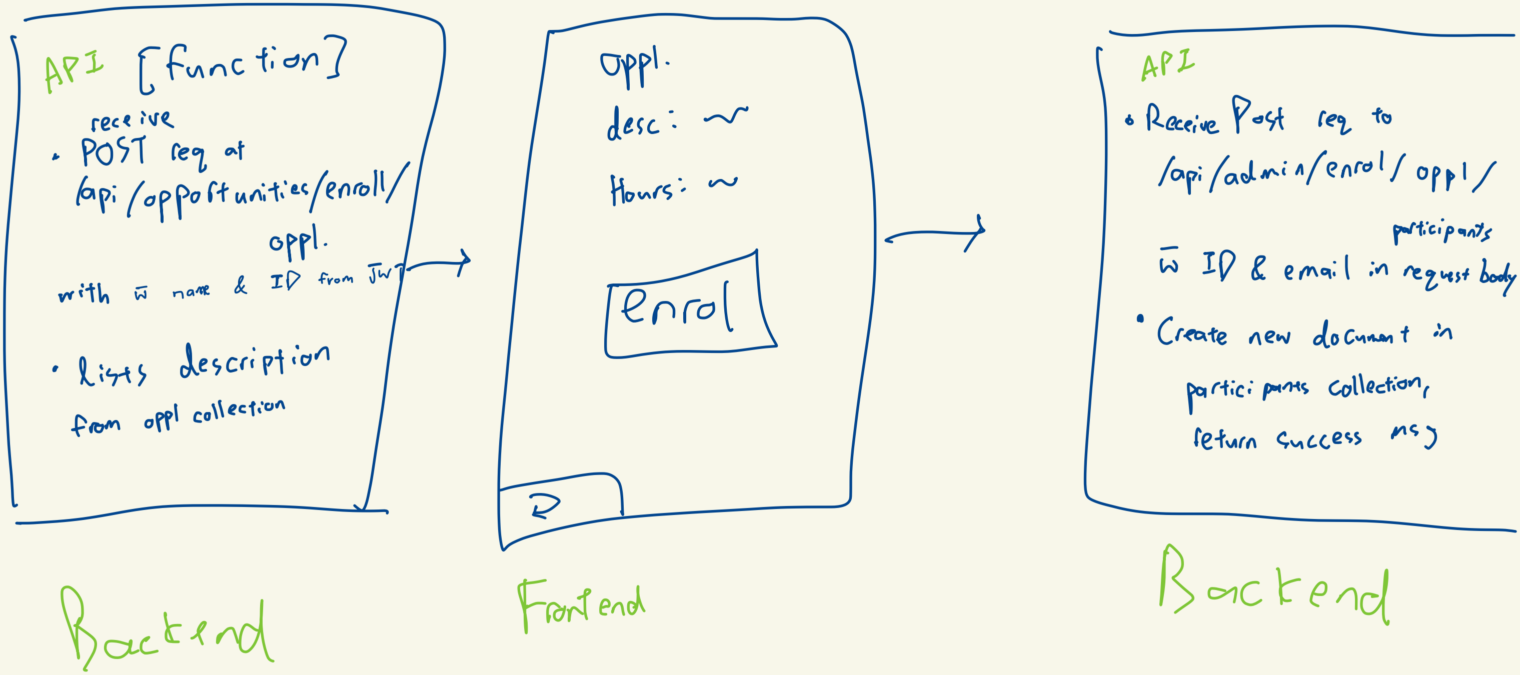
Backend

Frontend dashboard

3. Volunteer Opportunities



- Receives POST request at /api/volunteers/enrol
- Returns opportunities document in collection and returns a list of opps.



API [function]

receive
- POST req at /api/opportunities/enroll/
  oppl.
  with w̄ name & ID from JWT
- lists description from oppl collection

Backend

Oppl.

desc: ~

Hours: ~

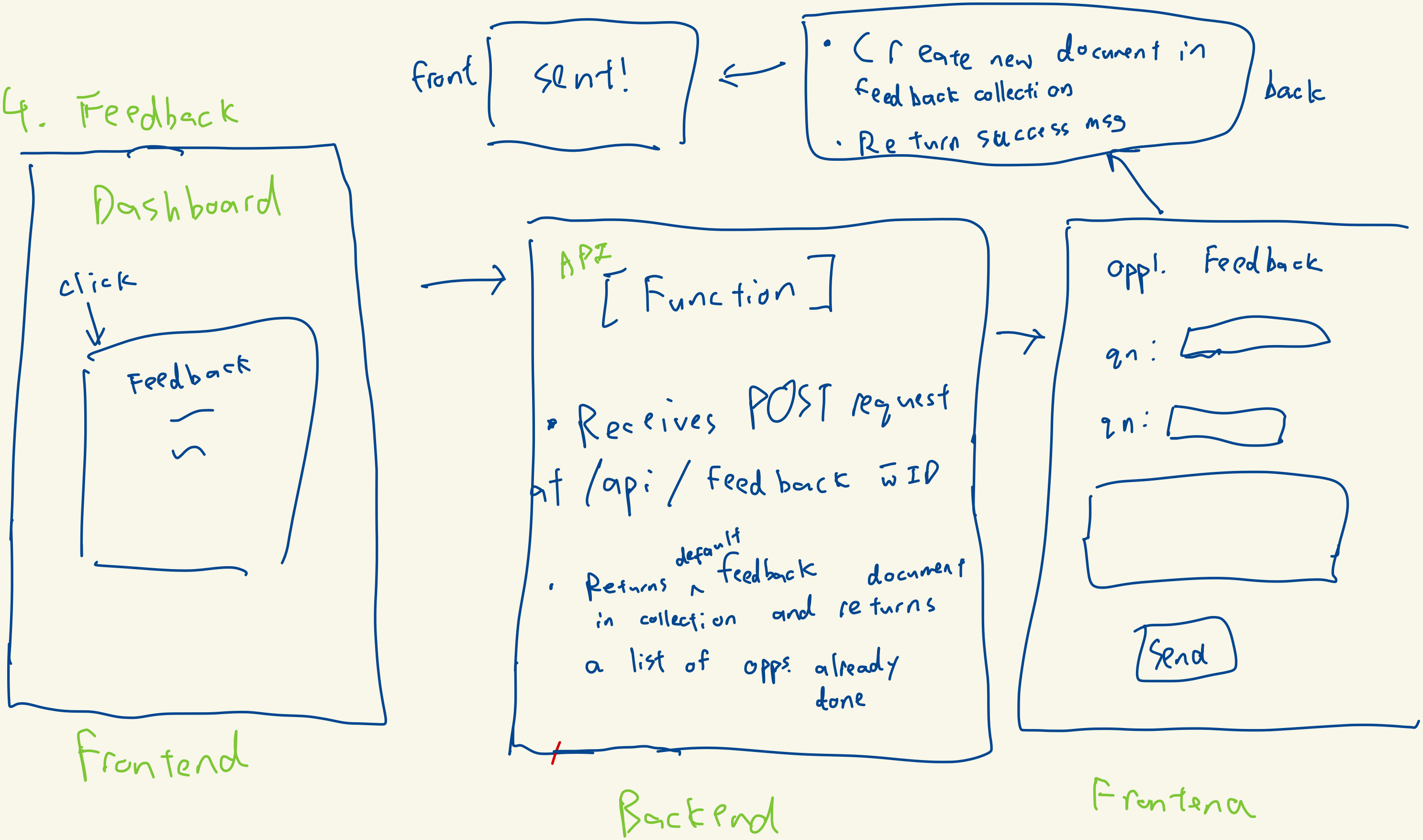
Frontend

API

- Receive Post req to /api/admin/enrol/ oppl/
  participants
  w̄ ID & email in request body
- Create new document in participants collection, return success msg

Backend

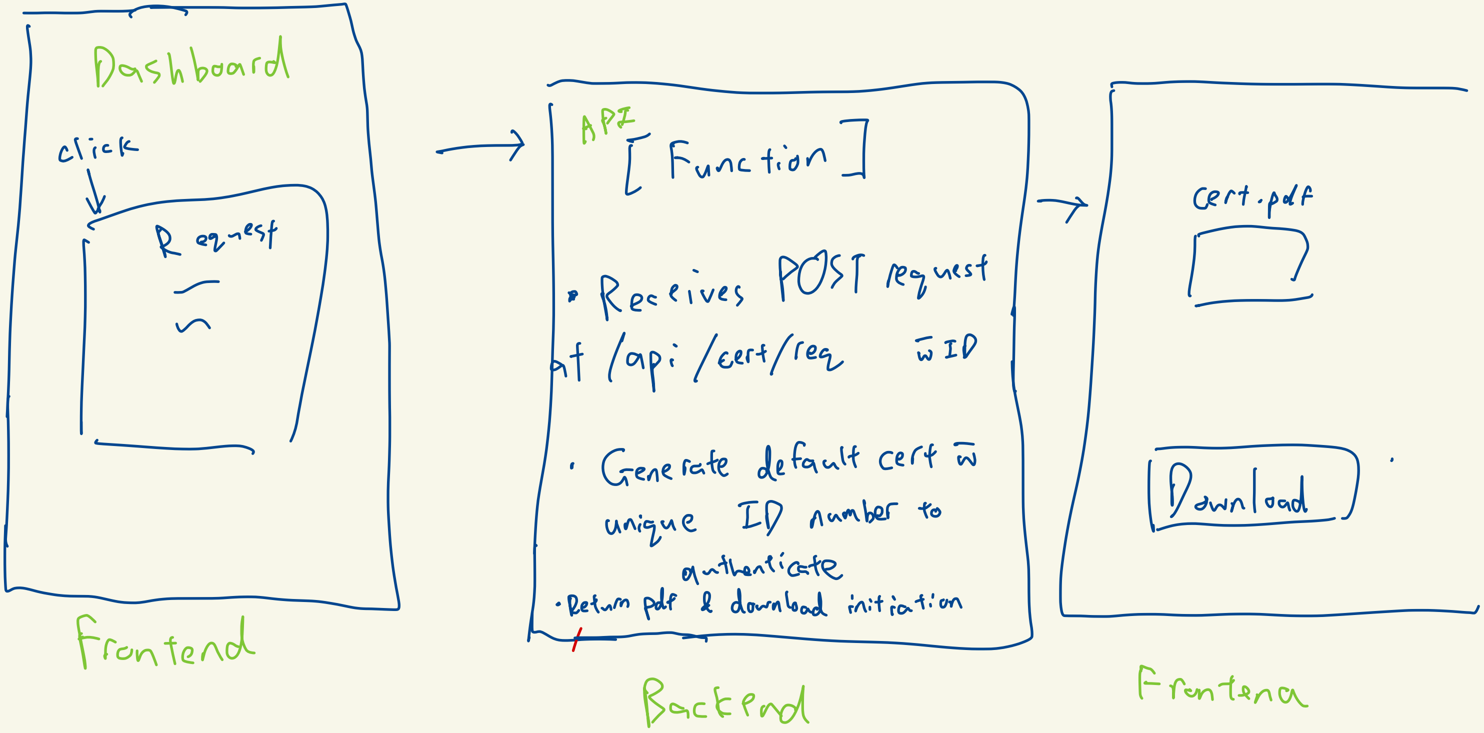
4. Feedback



- Create new document in feedback collection
- Return success msg

- Receives POST request at /api/feedback w̄ ID
- Returns default feedback document in collection and returns a list of opps already done

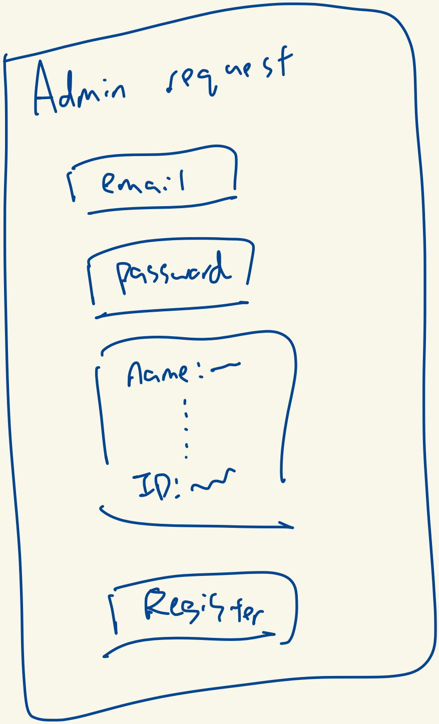
5. Cert Request



- Receives POST request at /api/cert/req w̄ ID
- Generate default cert w̄ unique ID number to authenticate
- Return pdf & download initiation

6. Admin register

F



B

receive
- POST req at /admin/register endpoint
- Create new admin req in db with hashed password & "pending" status

Existing Admin

- Existing admin views list of pending admin req

Approve Reject

* POST req received at /admin/approve or /admin/reject with ID of admin req

- Status update "approve" "rejected"

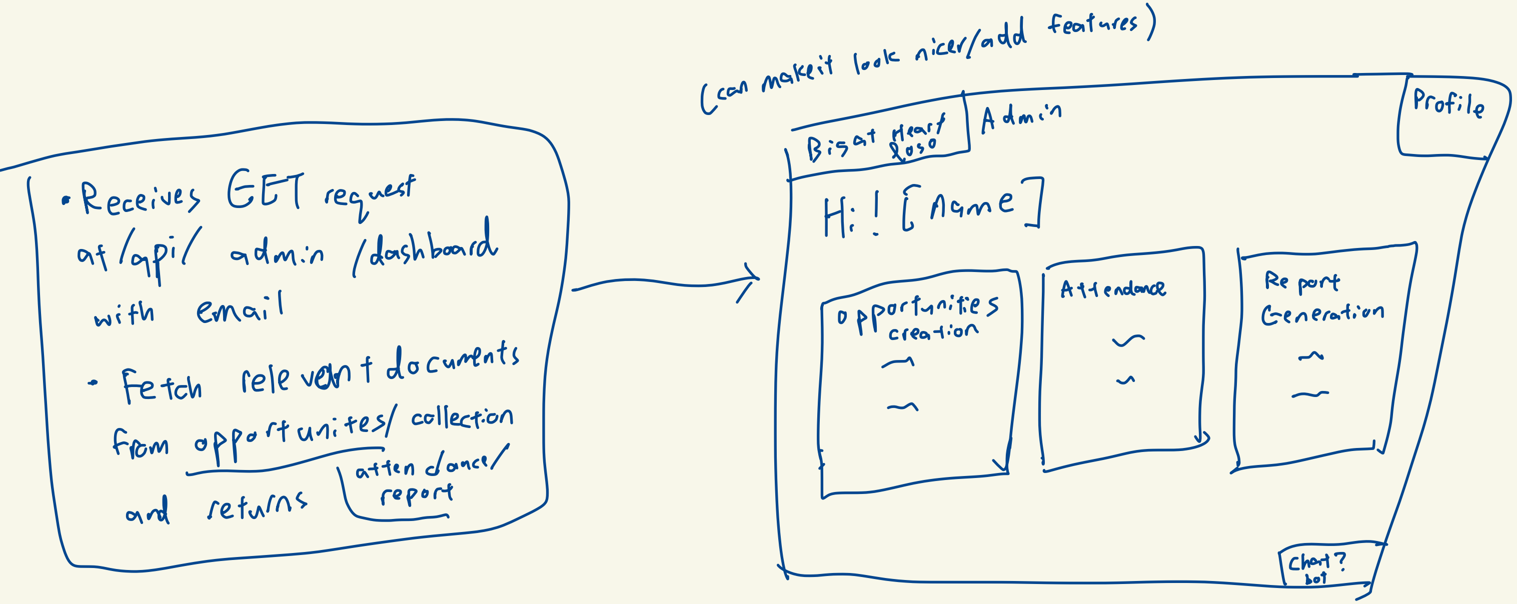
- Generate JWT (expire in 1hr) w/ new admins username + secret key
- Send JWT in response header

F

- receive JWT & stores in local storage
- Use JWT to auth subsequent req by including it in Auth header

B

1. Admin Dashboard



- Receives GET request at /api/ admin /dashboard with email
- Fetch relevant documents from opportunites/ collection and returns attendance/ report

Backend

Frontend dashboard