Name: Nourhane Amir Mahmoud.

The project documentation.

1. Architecture Overview:
   The application architecture consists of two containers

   1-Frontend container: Contains HTML, CSS, and JavaScript files to render the user interface.

   2-Backend container: Implements the backend logic and exposes RESTful APIs to interact with the frontend written using python.
2. Container Details:
   a. Frontend Container:
      - Base Image: nginx:alpine
      - Purpose: Serves static HTML, CSS, and JavaScript files.
      - Exposed Port: 80.

   b. Backend Container:
      - Base Image: python, flask and gunicorn.
      - Purpose: Implements the backend logic and exposes RESTful APIs.
      - Exposed Port:80.
3. Communication Mechanism:

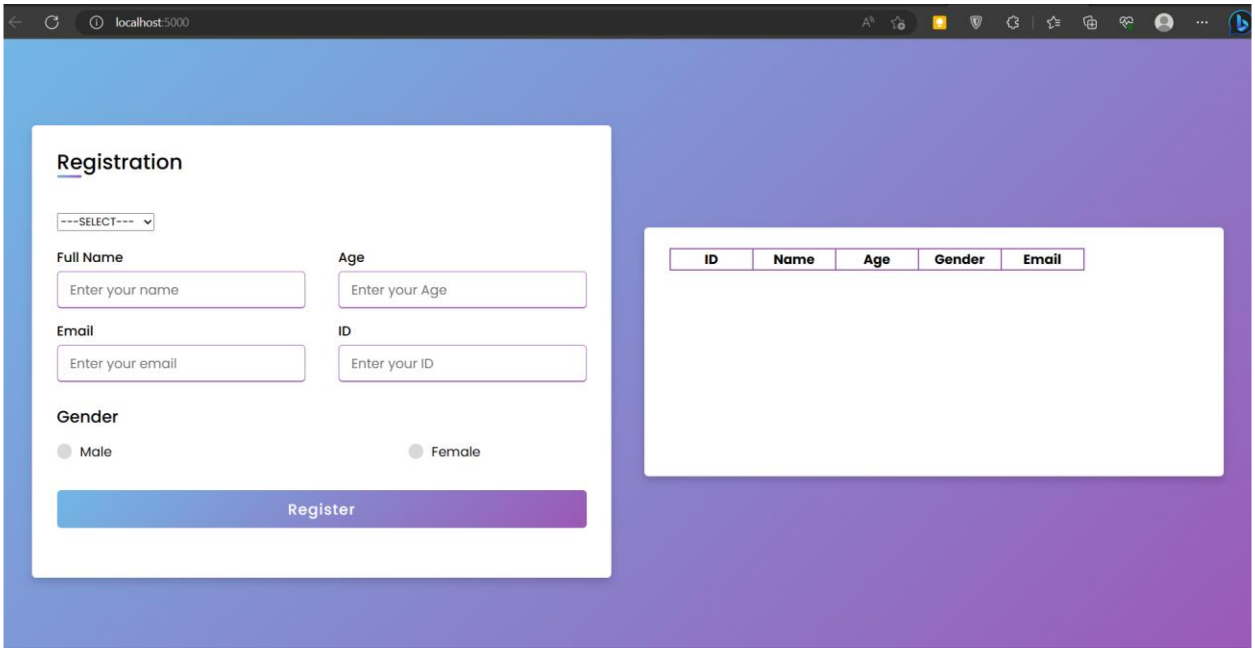
   The frontend container interacts with the backend container through RESTful APIs. The frontend container sends HTTP requests to specific endpoints exposed by the backend container. The backend container processes the requests and returns appropriate responses.

4. Deployment Steps:
   a. Run the yaml file attached with the project using the command
      - Docker-compose up

   b. Access the Application:
      - Open a web browser.
      - Enter the URL for the frontend container (in this case http://localhost:5000) to access the user interface.
      - The frontend container will send HTTP requests to the backend container's API endpoints for data retrieval or submission.

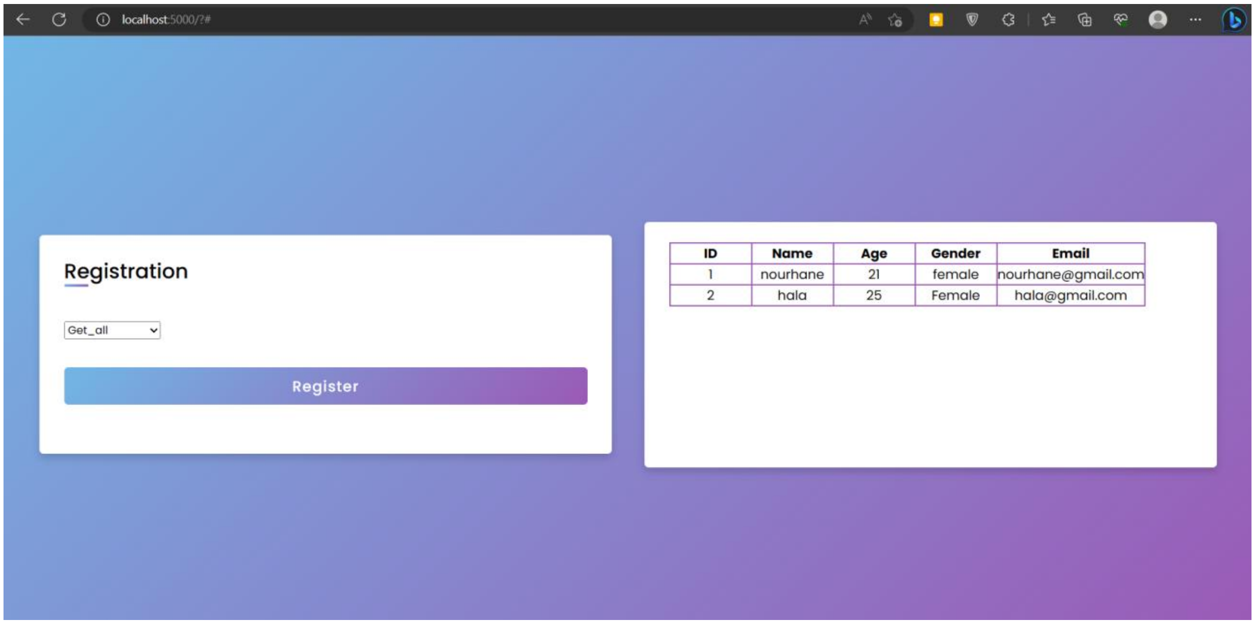
Photos of the project:

Home page:



ID	Name	Age	Gender	Email

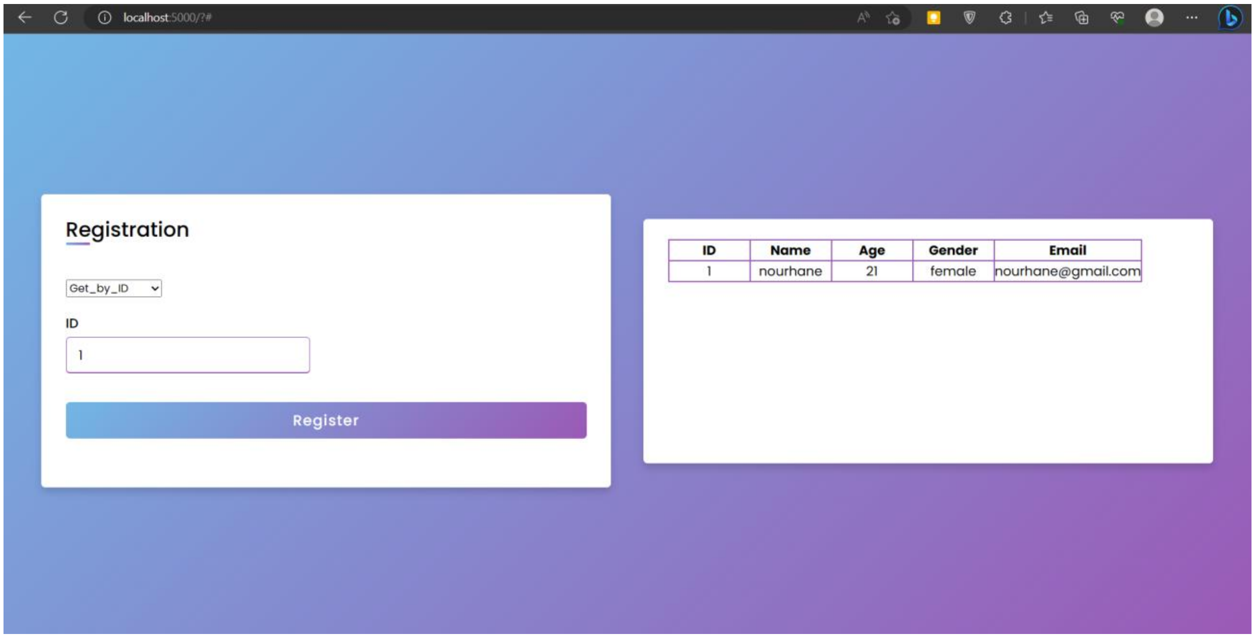
The get all method:



Get_all

ID	Name	Age	Gender	Email
1	nourhane	21	female	nourhane@gmail.com
2	hala	25	Female	hala@gmail.com

The get person by id method:



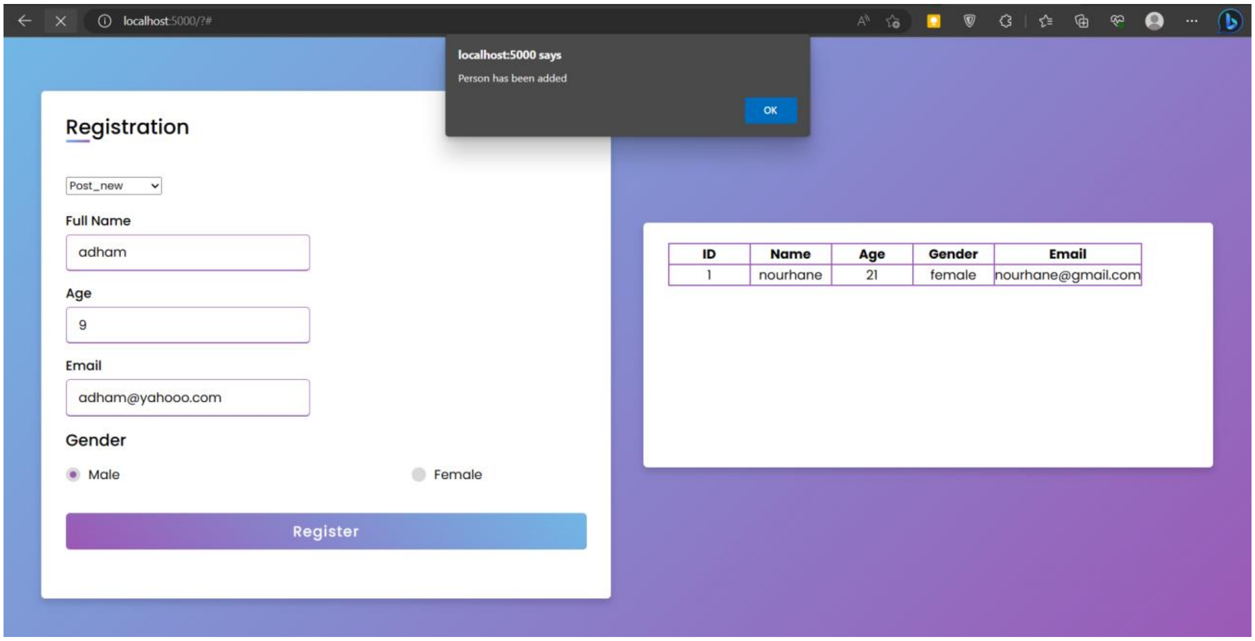
Registration

Get_by_ID

ID: 1

ID	Name	Age	Gender	Email
1	nourhane	21	female	nourhane@gmail.com

The post new method: (to add a new person)



localhost:5000 says

Person has been added

Registration

Post_new

Full Name: adham

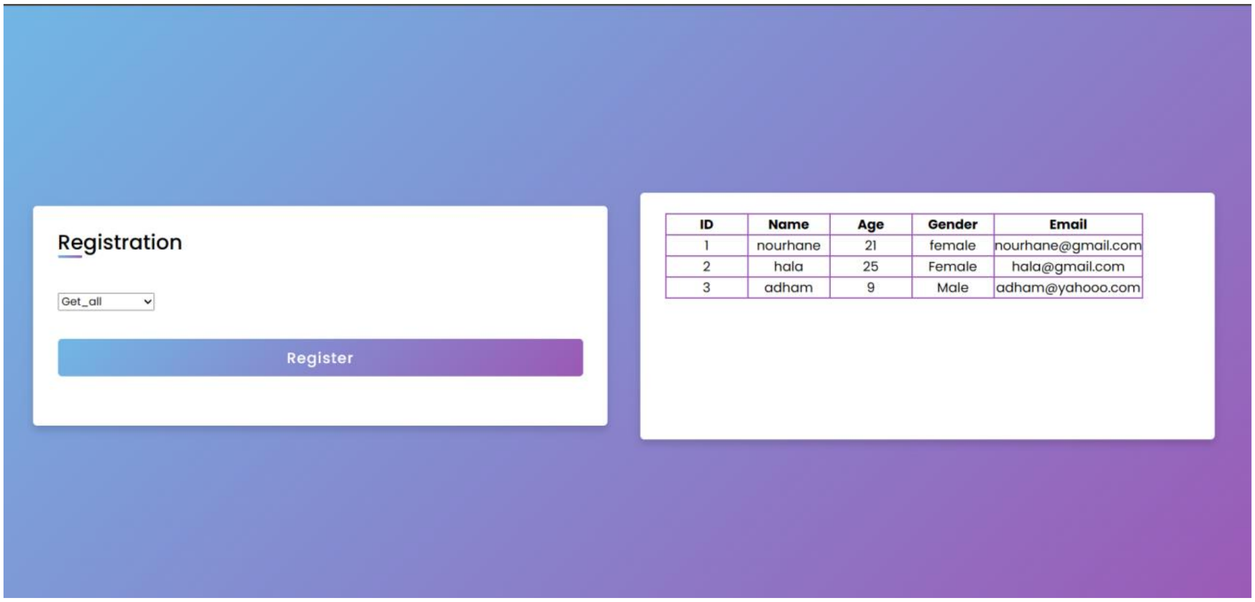
Age: 9

Email: adham@yahooo.com

Gender

● Male ○ Female

ID	Name	Age	Gender	Email
1	nourhane	21	female	nourhane@gmail.com

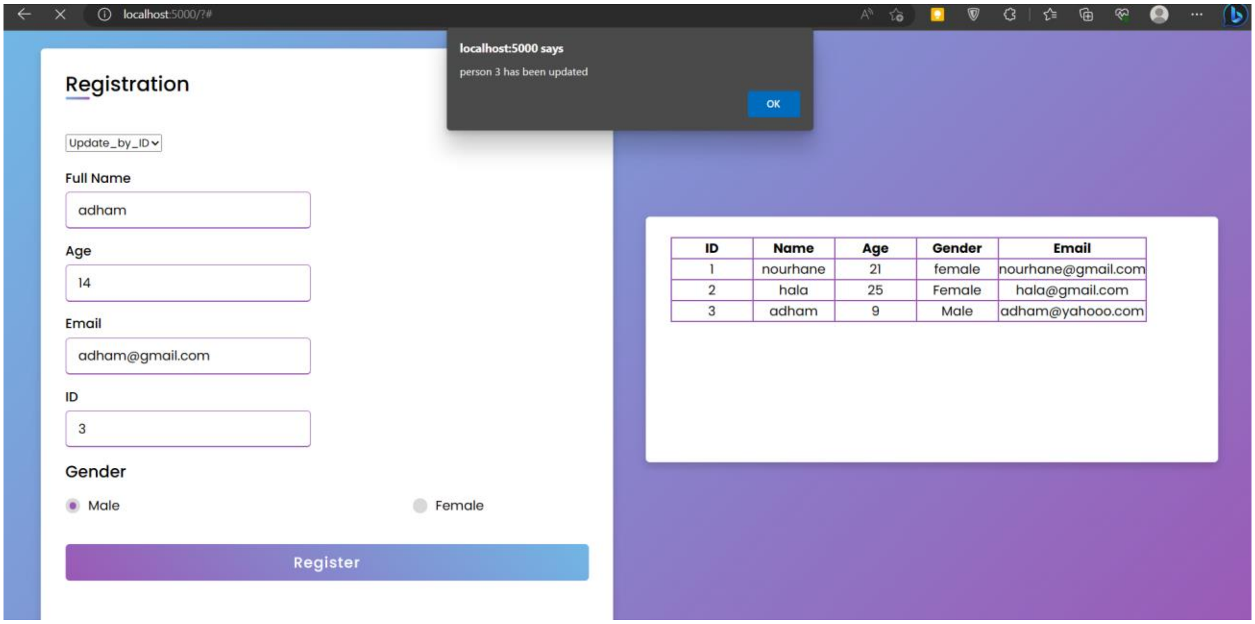


Registration

Get_all

ID	Name	Age	Gender	Email
1	nourhane	21	female	nourhane@gmail.com
2	hala	25	Female	hala@gmail.com
3	adham	9	Male	adham@yahooo.com

Update person by id: (to edit in an exist person)



localhost:5000/?#

localhost:5000 says

person 3 has been updated

Registration

Update_by_ID

Full Name: adham

Age: 14

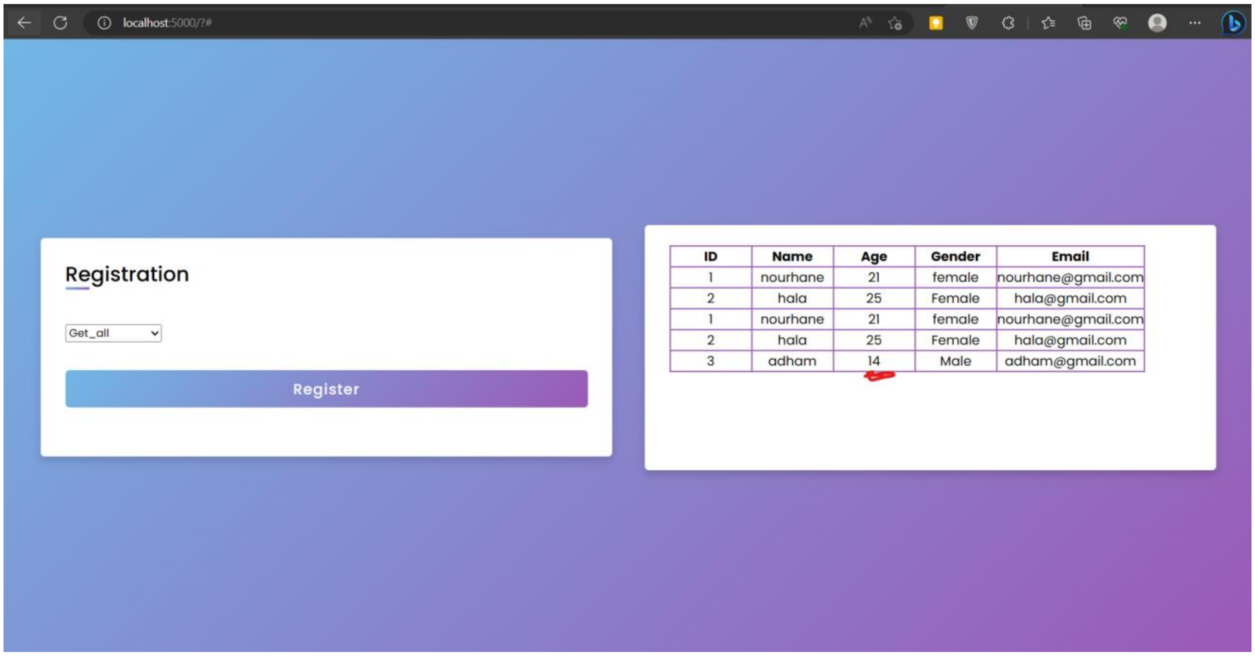
Email: adham@gmail.com

ID: 3

Gender

● Male ○ Female

ID	Name	Age	Gender	Email
1	nourhane	21	female	nourhane@gmail.com
2	hala	25	Female	hala@gmail.com
3	adham	9	Male	adham@yahooo.com

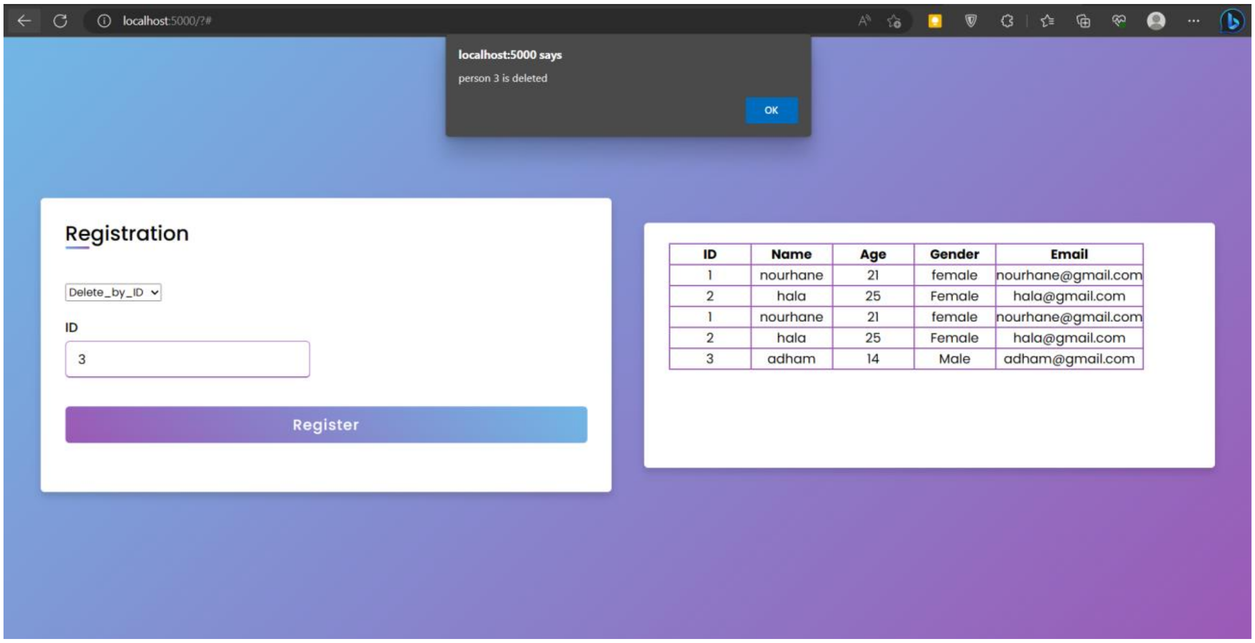


Registration

Get_all

ID	Name	Age	Gender	Email
1	nourhane	21	female	nourhane@gmail.com
2	hala	25	Female	hala@gmail.com
1	nourhane	21	female	nourhane@gmail.com
2	hala	25	Female	hala@gmail.com
3	adham	14	Male	adham@gmail.com

Delete person:



localhost:5000 says

person 3 is deleted

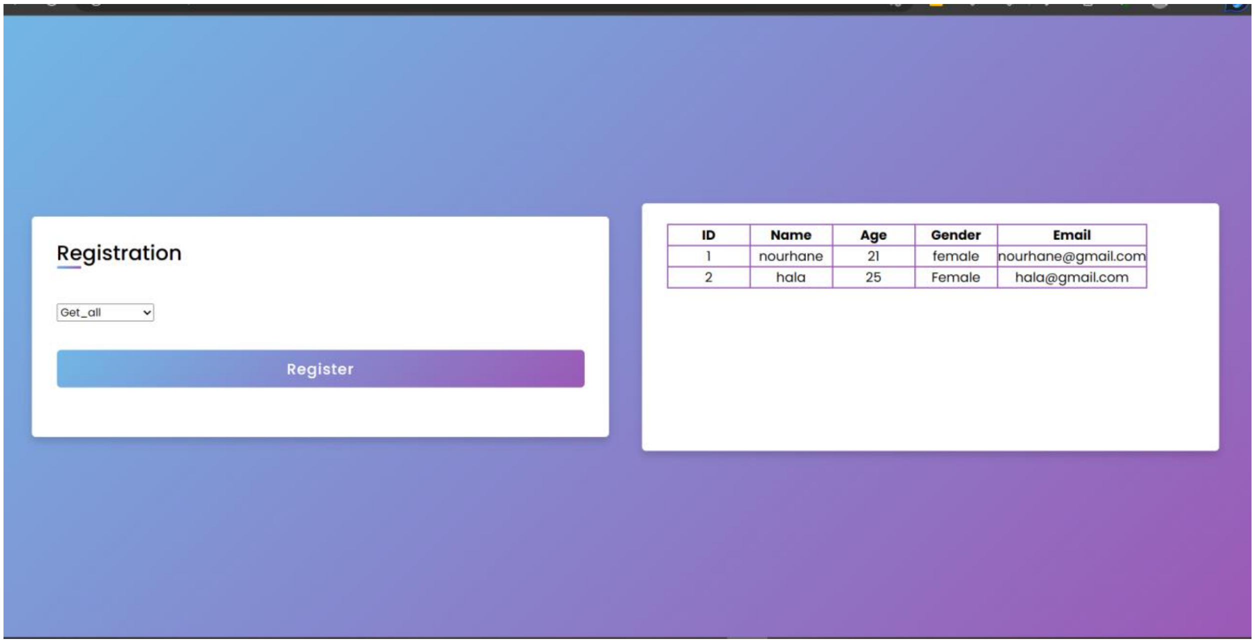
Registration

Delete_by_ID

ID

3

ID	Name	Age	Gender	Email
1	nourhane	21	female	nourhane@gmail.com
2	hala	25	Female	hala@gmail.com
1	nourhane	21	female	nourhane@gmail.com
2	hala	25	Female	hala@gmail.com
3	adham	14	Male	adham@gmail.com



ID	Name	Age	Gender	Email
1	nourhane	21	female	nourhane@gmail.com
2	hala	25	Female	hala@gmail.com