

## Assignment 6

Genetic research institute database - This is a database to keep record of patients, samples, their DNA sequences, funding organizations, employees etc. for the smooth organization and functioning of the institute.

By executing app.py, the web page will be hosted locally on our device.

Home page of the webapp will consist of the list of researches that are involved with the genetic institute. Updation, Insertion, Deletion options are available.

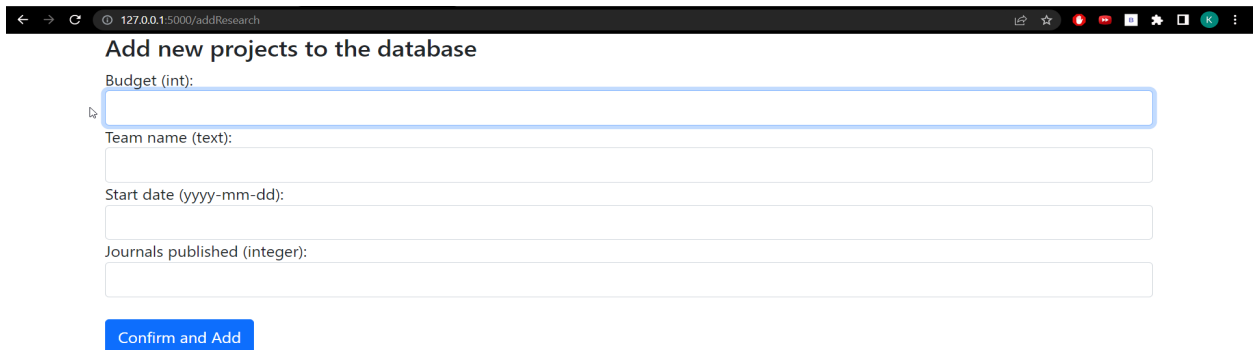


The screenshot shows a web browser window with the address bar displaying '127.0.0.1:5000'. The page title is 'List of researches'. It contains a table with the following data:

rid	budget	team name	start date	papers	modify	remove
1	353	uhuju	2012-10-02	4	<button>Update</button>	<button>Remove</button>
2	2000	finishers	1999-10-09	2	<button>Update</button>	<button>Remove</button>

Below the table is a blue button labeled 'Add new research projects'.

Clicking on the “Add new research projects” button will lead to another page asking for details of the new research project.

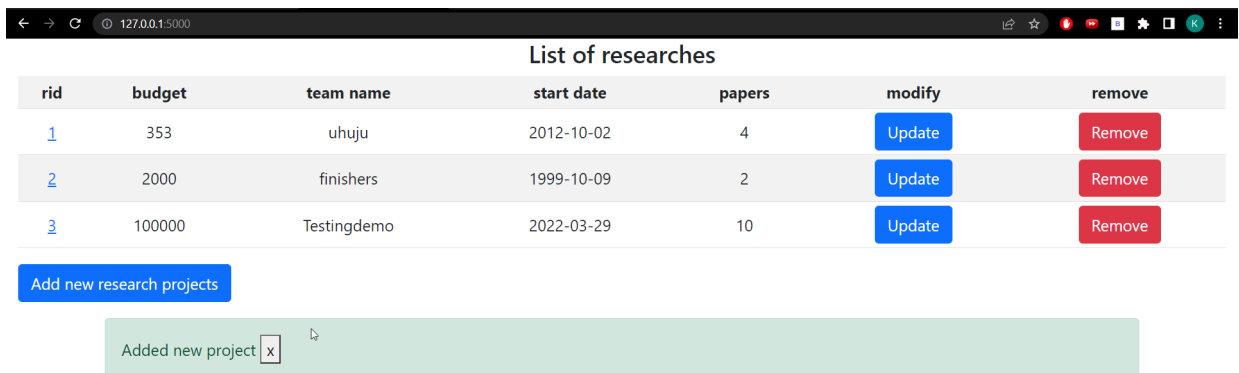


The screenshot shows a web browser window with the address bar displaying '127.0.0.1:5000/addResearch'. The page title is 'Add new projects to the database'. It contains a form with the following fields:

- Budget (int):
- Team name (text):
- Start date (yyyy-mm-dd):
- Journals published (integer):

Below the form is a blue button labeled 'Confirm and Add'.

Filling the details and clicking on “confirm and Add” will add the project details to the home page and a dialogue box pops up showing the project is added.



The screenshot shows the same web browser window as before, but the table now has three rows of data:

rid	budget	team name	start date	papers	modify	remove
1	353	uhuju	2012-10-02	4	<button>Update</button>	<button>Remove</button>
2	2000	finishers	1999-10-09	2	<button>Update</button>	<button>Remove</button>
3	100000	Testingdemo	2022-03-29	10	<button>Update</button>	<button>Remove</button>

Below the table is a blue button labeled 'Add new research projects'. At the bottom of the page, there is a green notification box that says 'Added new project' with a close button (X).

## Upon clicking on update

127.0.0.1:5000/updateResearch/3

### Modify existing research projects

Budget (int):  
100000

Team name (text):  
Testingdemo

Start date (yyyy-mm-dd):  
2022-03-29

Journals published (integer):  
10

[Confirm to modify](#)

After modifying the details, changes will be made and an updated dialogue box pops up.

127.0.0.1:5000

### List of researches

rid	budget	team name	start date	papers	modify	remove
<a href="#">1</a>	353	uhuju	2012-10-02	4	<a href="#">Update</a>	<a href="#">Remove</a>
<a href="#">2</a>	2000	finishers	1999-10-09	2	<a href="#">Update</a>	<a href="#">Remove</a>
<a href="#">3</a>	100000	Testingdemo- modified	2022-03-29	10	<a href="#">Update</a>	<a href="#">Remove</a>

[Add new research projects](#)

Updated!!! [x](#)

Removing the research project by clicking on the remove button of the research record.

127.0.0.1:5000

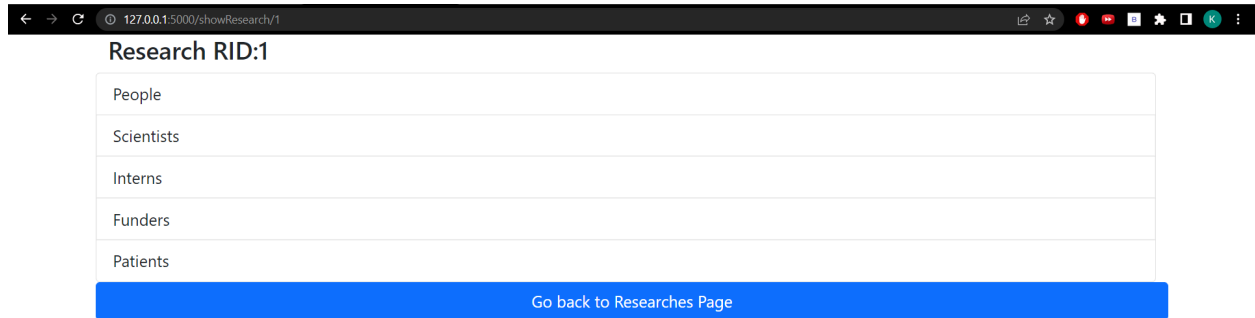
### List of researches

rid	budget	team name	start date	papers	modify	remove
<a href="#">1</a>	353	uhuju	2012-10-02	4	<a href="#">Update</a>	<a href="#">Remove</a>
<a href="#">2</a>	2000	finishers	1999-10-09	2	<a href="#">Update</a>	<a href="#">Remove</a>

[Add new research projects](#)

deleted!!! [x](#)

Clicking on the rid of the researches listed, will lead to a page showing different categories of people involved with the project.

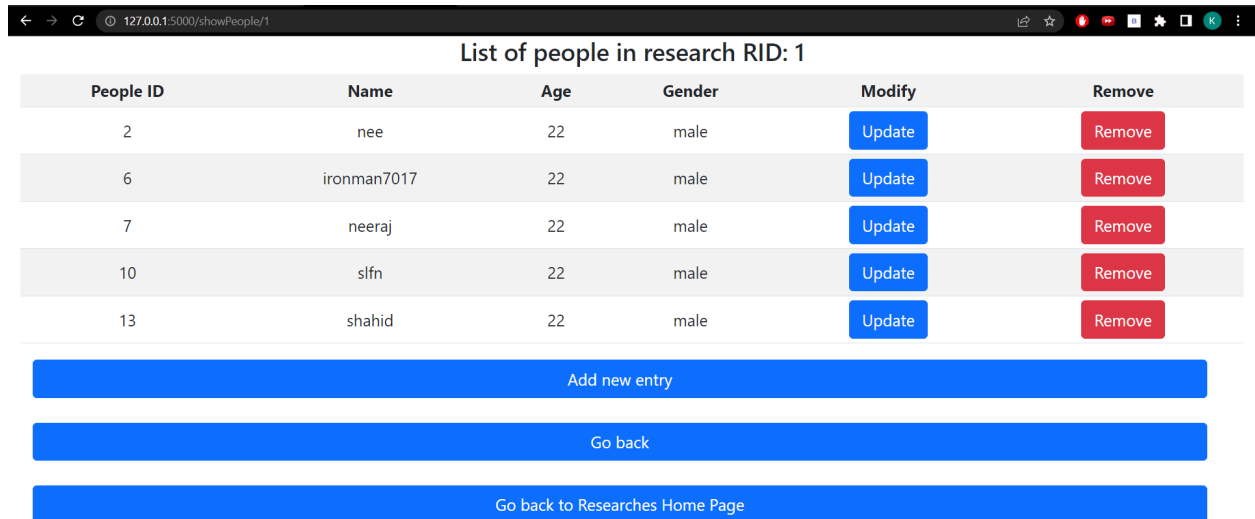


Research RID:1

- People
- Scientists
- Interns
- Funders
- Patients

Go back to Researches Page

Clicking on any of the categories will lead to a page with a list of people in the department. People page lists all the scientists, interns, funders and patients related with



List of people in research RID: 1

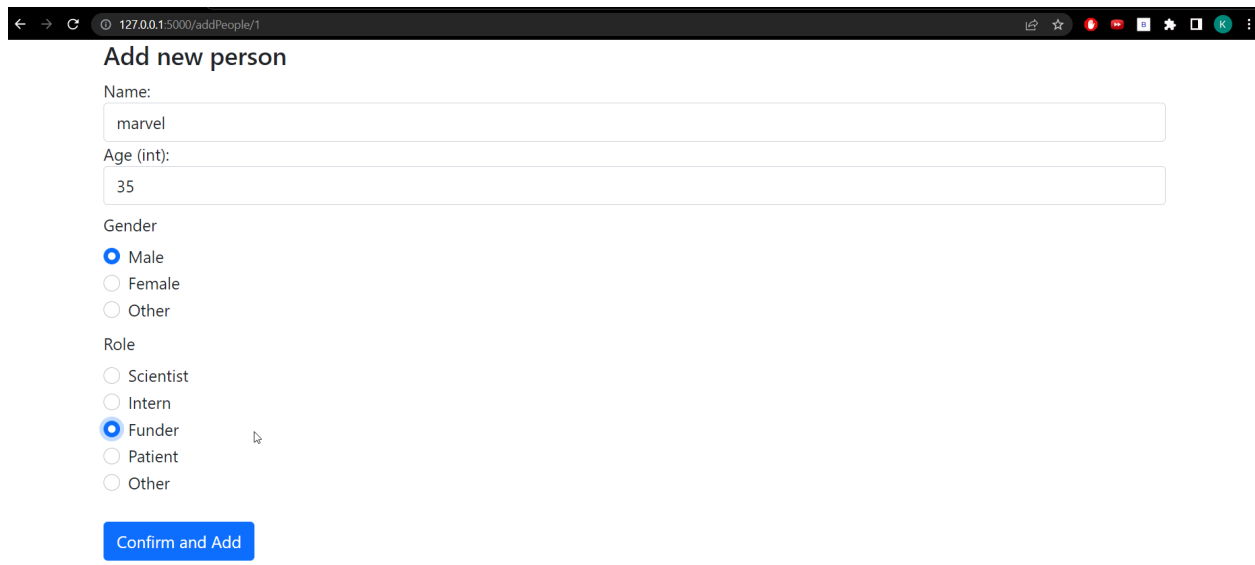
People ID	Name	Age	Gender	Modify	Remove
2	nee	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
6	ironman7017	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
7	neeraj	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
10	slfn	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
13	shahid	22	male	<a href="#">Update</a>	<a href="#">Remove</a>

Add new entry

Go back

Go back to Researches Home Page

Clicking on “Add new entry” :

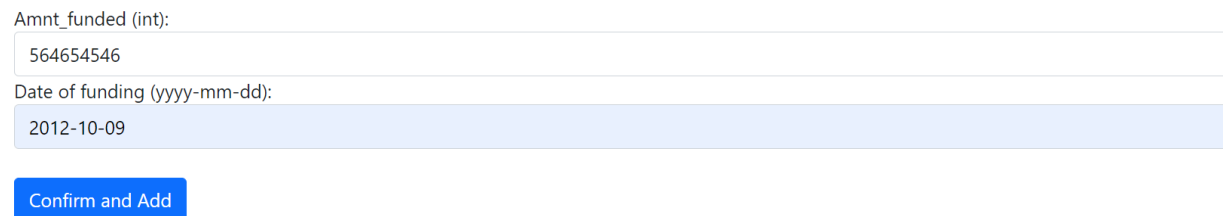


A screenshot of a web browser window showing a form titled "Add new person". The browser's address bar displays "127.0.0.1:5000/addPeople/1". The form contains the following fields and options:

- Name:** A text input field containing the value "marvel".
- Age (int):** A text input field containing the value "35".
- Gender:** Three radio button options: "Male" (selected), "Female", and "Other".
- Role:** Five radio button options: "Scientist", "Intern", "Funder" (selected), "Patient", and "Other".
- Confirm and Add:** A blue button at the bottom of the form.

Selecting on which role the newly added person belongs to will lead to different pages asking for more details of the person. For example choosing the role of the person as Funder leads to this page.

### Add more details of funder



A screenshot of a web form titled "Add more details of funder". The form contains the following fields and a button:

- Amnt\_funded (int):** A text input field containing the value "564654546".
- Date of funding (yyyy-mm-dd):** A text input field containing the value "2012-10-09".
- Confirm and Add:** A blue button at the bottom of the form.

After confirming, the newly added person will be seen in the list of people. Going back to the below page and clicking on ‘Funders’, we can see that a funder is also added. Similarly, if the new person added is a scientist or intern or patient, he/she will be added in the respective category too.

List of people in research RID: 1					
People ID	Name	Age	Gender	Modify	Remove
2	nee	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
6	ironman7017	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
7	neeraj	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
10	slfn	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
13	shahid	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
25	marvel	35	male	<a href="#">Update</a>	<a href="#">Remove</a>
<a href="#">Add new entry</a>					
<a href="#">Go back</a>					
<a href="#">Go back to Researches Home Page</a>					

Added Funder Details x

Research RID:1	
People	
Scientists	
Interns	
Funders	
Patients	
<a href="#">Go back to Researches Page</a>	

List of funders in research RID: 1						
People ID	Name	Transaction ID	Amnt funded	Date of funding	Modify	Remove
25	marvel	4	564654546	2012-10-09	<a href="#">Update</a>	<a href="#">Remove</a>
<a href="#">Add new entry</a>						
<a href="#">Go back</a>						
<a href="#">Go back to Researches Home Page</a>						

We can also add new funders/scientists/interns/patients from their respective category too.

Suppose we delete a person from the people category, he/she will be removed from the list of funders/scientists/interns/patients depending on his role. Let's see this below in an example. We will delete the person named Marvel from the list of people. Since she is a funder, she will also be removed from the list of funders.

### List of people in research RID: 1

People ID	Name	Age	Gender	Modify	Remove
2	nee	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
6	ironman7017	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
7	neeraj	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
10	slfn	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
13	shahid	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
25	marvel	35	male	<a href="#">Update</a>	<a href="#">Remove</a>

[Add new entry](#)

[Go back](#)

[Go back to Researches Home Page](#)

### List of people in research RID: 1

People ID	Name	Age	Gender	Modify	Remove
2	nee	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
6	ironman7017	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
7	neeraj	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
10	slfn	22	male	<a href="#">Update</a>	<a href="#">Remove</a>
13	shahid	22	male	<a href="#">Update</a>	<a href="#">Remove</a>

[Add new entry](#)

[Go back](#)

[Go back to Researches Home Page](#)

deleted!!! x

The funder 'Marvel' is deleted from the list of funders too which can be seen in the below pic.

List of funders in research RID: 1

People ID	Name	Transaction ID	Amnt funded	Date of funding	Modify	Remove
Add new entry						
Go back						
<a href="#">Go back to Researches Home Page</a>						

To open the list of samples of a respective patient and insert/update/delete new samples associated with that patient, click on the respective person id of the patient (hyperlinked) in the list of patients which will open the list of samples (refer below pic) where one can perform the required operations or just view the samples.

List of samples (People ID: 13)					
Sample ID	Person ID	Date collected	Body part	Modify	Remove
<a href="#">1</a>	13	2005-09-20	Shoulder	<button>Update</button>	<button>Remove</button>
<button>Add new entry</button>					
<button>Go back</button>					
<button>Go back to Researches Home Page</button>					

\*\*\*Click on sample ID to view/update/delete that sample's sequences\*\*\*

To open the list of sequences of a respective sample and insert/update/delete new sequences associated with that sample, click on the respective sample id of the sample (hyperlinked) in the list of samples which will open the list of sequences (refer to below pic) where one can perform the required operations or just view the sequences.

List of sequences (Sample ID: 1)						
Sequence ID	Sample ID	Length of sequence	DNA sequence	Genome region	Modify	Remove
2	1	22	AGCTTACAGATCATG	pot	<button>Update</button>	<button>Remove</button>
<button>Add new entry</button>						
<button>Go back</button>						
<button>Go back to Researches Home Page</button>						

If one deletes a sample, the sequences associated with that sample will also be deleted.