

Flask programmer documentation

This is web application that has an assistant database.

This application is written in python.

MVT(Model View Template) software design pattern was used in this application.

This app has this requirements:

There are some requirements in program hierarchy:

- Each assistant must have an attached picture, this picture can be uploaded by a user or the user can choose the generated one. (from e.g <https://thispersondoesnotexist.com>)
- create and update forms must provide select box which contains available jobs, this jobs should be returned by Your application and taken from <http://api.dataatwork.org/v1/jobs> , consider using caching
- Each picture should be stored in thumbnail format
- Each request must be properly validated
- Project must have prepared test data in database seeds
- Any form of testing is welcome
- The extendable and readable code will be counted as a plus
- Aesthetically pleasing and well made designs will be counted as a plus
- Documentation will be counted as a plus
- Adding additional functionality is encouraged

This application has crud endpoints:




- GET /assistants – displaying source,
- GET /assistants/create – displaying create form,
- POST /assistants – storing source,
- GET /assistants/update – displaying update form,
- PUT /assistants/{id} – updates source,
- DELETE /assistants/{id} – deletes source

I will test them in postman and describe them.

Get/assistants- this endpoint just display all assistants from database.

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css"
7     integrity="sha384-Vkoo8x4CGs034Hwv6GT/09PaXtkKtu6ug5TOeNV6gB1fEulPqf8N9H9uNof23Q9Ifj" crossorigin="anonymous">
8
9 </head>
10
11 <body>
12
13   <script>
14     function deleteAssistant(id) {
15       fetch(document.baseURI + '/' + id, {
16         method: 'DELETE'
17       })
18       .then(res => res.json())
19       .then(data => location.replace(document.baseURI));
20     }
21
22   </script>
23
24   <table class="table">
25     <thead class="thead-dark">
26       <tr>
27         <th>Assistant Id</th>
28         <th>Job Id</th>
29         <th>First name</th>
30         <th>Last name</th>
31         <th>Email address</th>
32         <th>Picture</th>
33         <th>Action</th>
34     </thead>
35   </table>
```

Here is ss from web browser:

Assistant Id	Job Id	First name	Last name	Email address	Picture	Action
1	4th Grade Teacher	Iza	Piechowiak	iza@gmail.com		<div>Delete</div> <div>Update</div>
2	4th Grade Teacher	Janusz	Kowalski	janusz@gmail.com		<div>Delete</div> <div>Update</div>
3	4th Grade Teacher	Jacek	Kaczmarek	kaczmarek.jacek10@gmail.com		<div>Delete</div> <div>Update</div>

Get/assistants/create- this endpoint just shows page where you can enter new assistant data and then save them.

SS form postman:

The screenshot shows a Postman interface for a GET request to `http://127.0.0.1:5000/assistants/create`. The response is an HTML document with a status of 200 OK, a time of 32 ms, and a size of 6.08 KB. The HTML content is as follows:

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <link rel="stylesheet" href="/static/css/main.css">
7   <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css"
8     integrity="sha384-Vkoo8x4CGs034HmVx087/QSpatxkcu6ugSTOelN6gBifewP9399N0rZ39G1fJm" crossorigin="anonymous">
9
10  <head>
11    <h3>Assistant Registration Form</h3>
12  </head>
13
14
15 </head>
16
17 <body>
18
19   <form action="/assistants" method="POST" enctype="multipart/form-data">
20     <br>
21     <div class="form-group">
22       <h5>
23         <label for="exampleFormControlInput1">First name:</label>
24       </h5>
25       <input type="text" name="first_name" id="first_name"
26         class="form-control" id="exampleFormControlInput1" placeholder="insert first name" required>
27     <br>
28     <h5>
29       <label>Last name:</label>
30     </h5>
31     <input type="text" name="last_name" id="last_name" class="form-control" id="exampleFormControlInput1" placeholder="insert last name" required>
32     <br>
33   </form>
```

SS form web browser:

Assistant Registration Form

First name:

insert first name

Last name:

insert last name

Email:

insert email_address

Job name:

Pick your job name

Upload picture:

Not choosing any file will cause file to generate automatically

Choose pictureBrowse

Save

Here all data fields are required, so if you don't insert all needed data then you won't be able to save them and add to database.

First name and Last name are text fields.

Email is email field so you need type there email@gmail.com or another correct email.

You can choose job from jobs list. Jobs are from json file.

Last option, you can upload your own photo or photo will be automatically generated from website: <https://randomuser.me/api>

Post/assistants- this happens when you press save button and all data are correct.

Then new assistant is added to database.

SS from postman:

POST http://127.0.0.1:5000/assistants

Send Save

Params Authorization Headers (8) **Body** Pre-request Script Tests Settings Cookies Code

none form-data x-www-form-urlencoded raw binary GraphQL







KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> inputfile	tommy.jpg	
<input checked="" type="checkbox"/> first_name	Bartek	
<input checked="" type="checkbox"/> last_name	Kaczmarek	
<input checked="" type="checkbox"/> email_address	bartek@gmail.com	
<input checked="" type="checkbox"/> job_id	15	
<input checked="" type="checkbox"/> pic_name	tommy	
Key	Value	Description

Body Cookies Headers (4) Test Results Status: 200 OK Time: 39 ms Size: 57.76 KB Save Response

Pretty Raw Preview Visualize HTML

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <link rel="stylesheet" href="/static/css/main.css">
7   <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css"
8     integrity="sha384-Vkoo8x4CGs03+Hhxv8T/Q5PaXtkKtu6ug5TOeNV6gBiFeWPGFN9MuhOf23Q9Ifjh"
9     crossorigin="anonymous">
10
11
12 </head>
13
14 <body>
15
16   <script>
```

Result in browser:

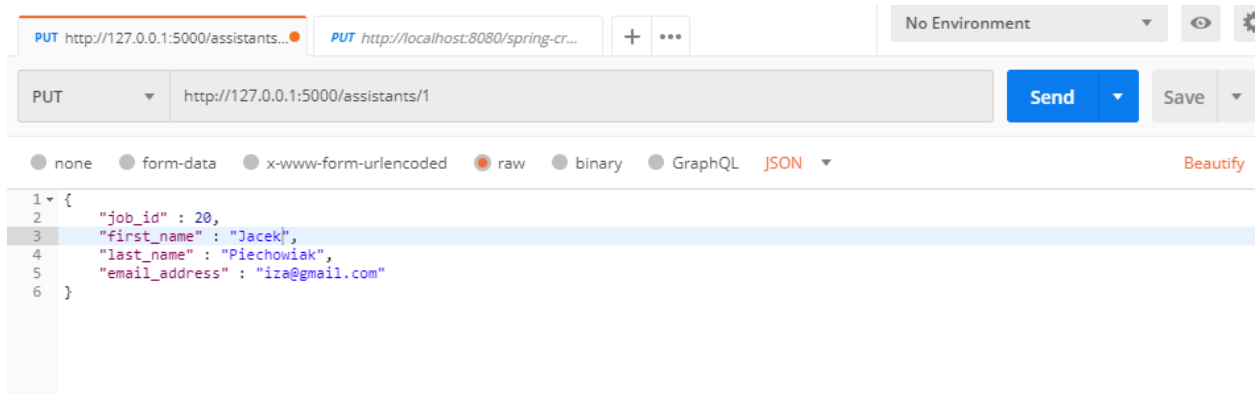
Assistant Id	Job Id	First name	Last name	Email address	Picture	Action
1	4th Grade Teacher	Iza	Piechowiak	iza@gmail.com		Delete Update
2	4th Grade Teacher	jacek	Kowalskaaa	janusz@gmail.com		Delete Update
3	3D Animator	Jacek	Kaczmarek	kaczmarek.jacek10@gmail.com		Delete Update
4	2 Year Olds Preschool Teacher	Jacek	Kaczmarek	kaczmarek.jacek10@gmail.com		Delete Update
5	21 Dealer	Jacek	Kaczmarek	kaczmarek.jacek10@gmail.com		Delete Update
6	3rd Grade Teacher	Bartek	Kaczmarek	bartek@gmail.com		Delete Update

Get/assistants/update


This endpoint just shows update form of selected assistant. It is same as create assistant but current data are already inserted and you can update them if you want.

PUT /assistants/{id} – this do all updating work and changes database data.

SS from postman:



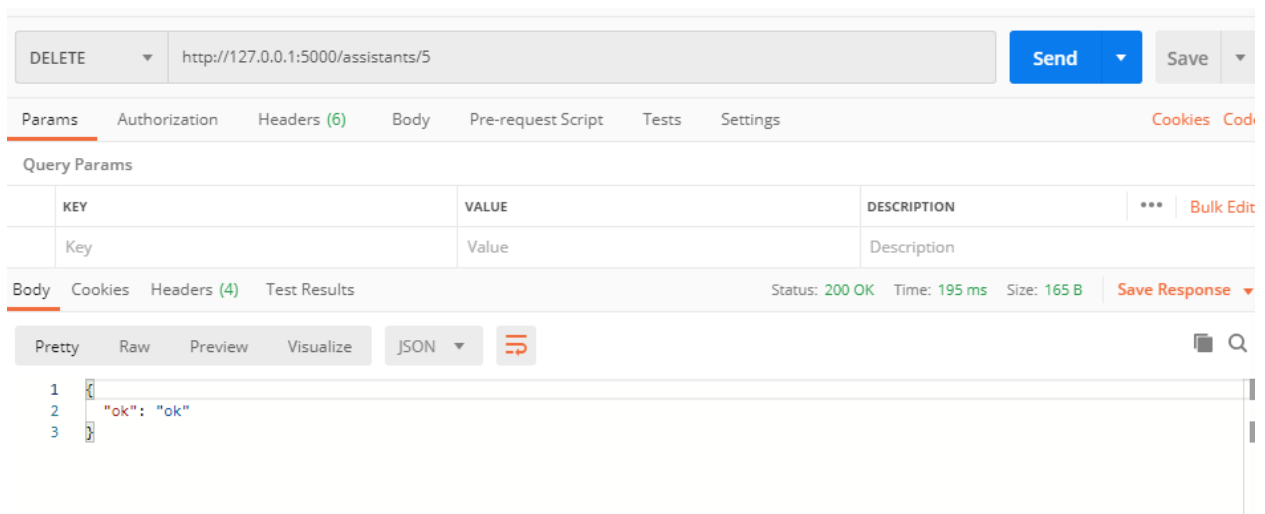
Result in web browser:

Assistant Id	Job Id	First name	Last name	Email address	Picture	Action
1	4th Grade Teacher	Jacek	Piechowiak	iza@gmail.com		<div>Delete</div> <div>Update</div>





DELETE /assistants/{id}- this endpoint removes one assistant data from database.

You can remove assistant by clicking red button 'Delete'.

SS from postman:



SS form web browser:

Assistant Id	Job Id	First name	Last name	Email address	Picture	Action
1	4th Grade Teacher	Iza	Kaczmarek	iza@gmail.com		<div>Delete</div> <div>Update</div>
2	4th Grade Teacher	Janusz	Kowalski	janusz@gmail.com		<div>Delete</div> <div>Update</div>
3	4th Grade Teacher	Jacek	Kaczmarek	kaczmarek.jacek10@gmail.com		<div>Delete</div> <div>Update</div>
4	3D Artist	Jacek	Kaczmarek	kaczmarek.jacek10@gmail.com		<div>Delete</div> <div>Update</div>

As you can see there is no assistant with id number equal to 5 because it was just deleted. But remember to insert correct id number. If the assistant you want to delete does not exist, then the program won't remove anything from the database.