

DATABASE SYSTEMS ENGINEERING PROJECT

SUMMER CAMP MANAGEMENT SYTEM

PART III

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SUMMER CAMP MANAGEMENT SYSTEM

PART III

PROJECT STRUCTURE

Summer Camp Management system is a Web Application.

Technologies used to build the application:

- ◆ Backend:
 - ◇ Python
 - ◇ Flask
- ◆ Frontend:
 - ◇ HTML
 - ◇ CSS
 - ◇ JavaScript
 - ◇ Bootstrap
- ◆ Database:
 - ◇ MySQL

Directory tree:

```
summer-camp/  
├─ app.py  
├─ database/  
│   ├── dictionaries-population.sql  
│   ├── sample-data-population.sql  
│   └─ summer-camp-ddl.sql  
├─ static/  
│   └─ pfp.svg  
├─ templates/  
│   ├── apply-for-program.html  
│   ├── dashboard.html  
│   ├── home.html  
│   ├── manage-applications.html  
│   └─ your-applications.html  
└─ instructions.pdf
```

`app.py` – application's core file, where all the app's **logic** and **database** usage parts happen.

`database/` – folder that contains SQL scripts needed for **database** creation and population.

`templates/` - folder that contains **HTML pages** run on the client side.

RUNNING THE PROJECT

1. To run the project, **Python 3.3** or higher is required.
2. Install **Flask**.
3. **MySQL server** is required to execute the application.
4. Next, install **MySQL connector** for Python. Instructions can be found here: <https://dev.mysql.com/doc/connector-python/en/connector-python-installation-binary.html>
5. Before running the project, the scripts in `database/` folder should be executed in MySQL server in the following order:
 - a. `summer-camp-ddl.sql` (obligatory)
 - b. `dictionaries-population.sql` (obligatory)
 - c. `sample-data-population.sql`
6. In the `app.py`, change the configuration to your MySQL server on line 7.
7. After database is ready, it's time to run the project.

To run the project, in your terminal navigate to the project's folder `summer-camp/`, and execute command:

```
python3 app.py
```

8. If everything is set up correctly, the following lines should appear on the terminal:

```
[anton@Antons-MacBook-Pro summer-camp % python3 app.py]
* Serving Flask app 'app' (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: on
* Running on http://127.0.0.1:8000/ (Press CTRL+C to quit)
* Restarting with stat
* Debugger is active!
* Debugger PIN: 281-679-712
```

9. Now in the browser, type the address from the message on the terminal, and the app should run.

Note: By default, the app is set to run on the 8000 port. If port 8000 is used by other application, in `app.py` on the line 794 change the port number to one which is available.

```
app.run(debug=True, port=8000)
```

CHANGE LOG

No major changes to the project have been done since the change log for the 2nd part of the project. Change log for the 2nd part of the project can be found in the report of the 2nd part of the project.