

# Report

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## Description

This task was given to me at Monday (26/04) morning by the team of Darkpony. I was expected to create a website, using the **Bootstrap 5 framework**. In that way, I was able to add a lot of components (which I was happy to find out that are highly customizable!) such as, tables, lists, a carousel etc, without the need of writing the html,css code from the beginning. The website is comprised of a **single html page**, where the user navigates with the navigation bar, that is located in the top of the page.

All the sections of the website, retrieve some of their data with asynchronous API calls, to a database. The RestAPI was created with the use of **FastAPI framework**, in the **Python** programming language. It is a simple to understand and to use framework, that helps to bring the database and the webpage together. The database uses **SQLite**. It is a library that implements a small, fast, self-contained, high-reliability, full-featured, SQL database engine.

## Expected Outcomes

Through this project, I look forward to take a good dive in the waters of web development. Since it is my first time that, in a project, I have to pay attention to the front and the backend, I expect to understand more the full operation of a webpage. I had some prior experience with bootstrap 4, but never with SQLite and the FastAPI. The need to complete this project in a timeframe of 5 days, made me understand more the pace and the demands of the work environment.

From the first day that I received and read the e-mail from mr. Demetris Parpounas, I knew that I had to devote a large portion of my time to studying these new technologies. As much as enjoyable as this process was, it did restrict my time window even more.

## Data flow in the project

All the data are stored inside the project folder, or in its sub-folders.



The relative paths of the files are stored in records, inside the tables of the db.



When the API receives a request, it retrieves from the db, the paths of the requested files, and parses them to the webpage that made the asynch-call.



The webpage, since it now has the paths of the files it needs, goes and retrieves them from the project folder.

### Difficulties/Left behinds:

1. A problem with the quotes list. I connected the JS with the HTML and I manages to parse data from the HTML to JS successfully. But, no matter how many shuffling-algorithms I implement, I am struggling to change the order of the quotes (in order for them to appear randomly). I believe that it is a problem that can be fixed easily with a bit more research and practice in JS.
2. Time. As I mentioned before, my time was severely restricted by my lack of knowledge. But nevertheless, I believe that the lack of time benefitted me due to learning how to work under pressure.
3. The SQLAlchemy part of the code that was needed to be able to retrieve data from the db is not completed. As a result, all the returned paths and data from the API are manually placed inside the Python code, and not dynamically retrieved. There is no actual connection between the webpage and the db.
4. The articles section of the webpage is not finished. It took me some time to decide in what way I was going to place the articles, if it was going to be with a table or with a group list. After I tried some variations to make it look more appealing, this is why the first article with the second one appear in a different way. Also, it is the part that is the least dynamic of them all.
5. I consider the section of the videos to be not pretty enough.
6. I wanted to invest more time in defining the alt="" attribute in all the sections of the project.

7. Lastly, more time should be spent in populating the db with all the necessary data, since at its current state, it is practically empty.

## Final Thoughts

I am currently doing this task, during the Great Week before Easter. I came to the conclusion that I am enjoying my vacations so much because of this task. It was my first formal contact with the world of web-development (which I wasn't really sure I like) and it turned out that I can very easily imagine myself doing it, for a long time. I have knowledge of the level of the project that I turn-in, and I know that it is not very high.

Still, I am happy with what I've achieved, because a week ago, I wouldn't be able to imagine doing all this. I am grateful to Darkpony for giving me the opportunity to learn so many new technologies, while simultaneously having fun.

It was my mistake not to contact mr. Demetris Parpounas, because I believe that some of the question that I had could be easily be resolved by him. Although, his willingness to help and to assist me was apparent from the e-mail that he wrote (he provided all the needed documentations, even his phone number), and I thank him for that.

I plan to finish this project, because web-development sparked interest and I believe that it is a shame to leave it undone. I would be very happy If the darkpony team would be able to take the time (even some spare minutes) in giving me feedback.