

IY4013
Object Oriented Programming
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January 2024

I confirm that this assignment is my own work.
Where I have referred to academic sources, I have provided in-text
citations and included the sources in the final reference list.

Section 1: Requirement Analysis

Identification of users

- The website has register and sign in pages which are used to identify users.
- If a user registers on the website the data will be stored in sqlite.
- When users sign in to the website, the website will be able to recognize users through accessing sqlite and using a function.

User stories or personas

- Considering different users(age between 10 to 50), the website uses a gentle approach such as using cute animals photos and gifts, and using some mild colours as base ones.

Identify and classify requirements(MoSCoW)

Must-haves

- The website has a donation point card which is crucial for the web since the web is connected to donation.
- It also provides the features of signin and register which are essential for identification of users.
- The web contains several html templates while one being a base template.
- It has flask routes and models which are essential for the project.

Should-haves

- The website has some contents about the brief explanation of the web and history of the web.

Could-haves

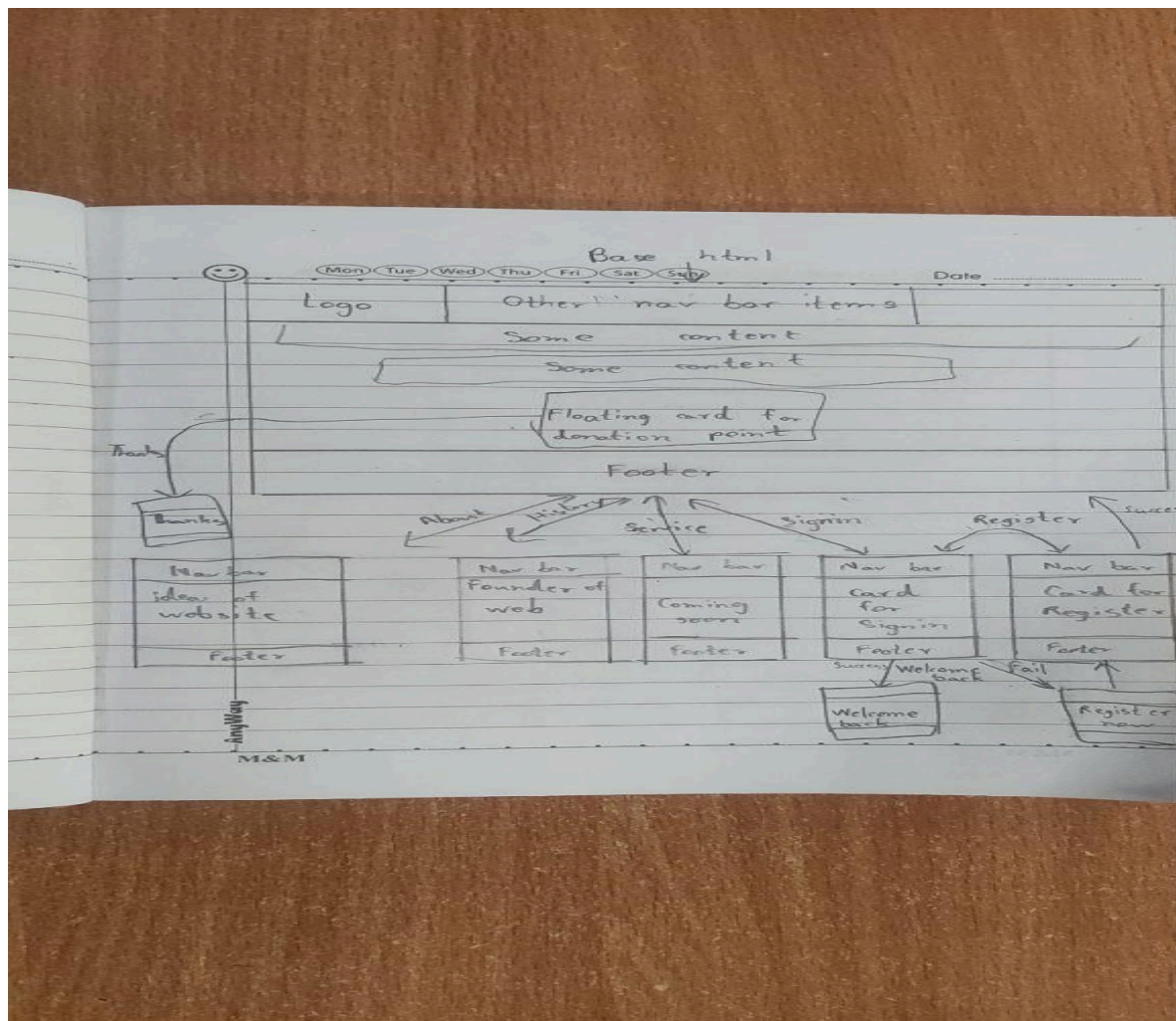
- Although contact and help us content are nice to be included, unfortunately it does not have any content. Though I will be working on it in the future.

Won't-haves

- At first, I thought about the donation point to make monthly and one-stop donation.It appears that it is too complex and I don't have enough knowledge to implement that one.So, I excluded the plan and just did a simple donation card.

Section 2: Plan

Overall project plan



- This is the overall plan for the project.
- It shows some templates which are used in the website.
- And also contains the contents of the website and basic relations between templates.

Timeline and milestones

- The actual time used for the project may be around one week though it took me about 4 weeks from start doing the project.
- The first milestone was to create the basic frame.
- After that, completing the flask routes and creating models.
- And then, implementation of some functionalities.

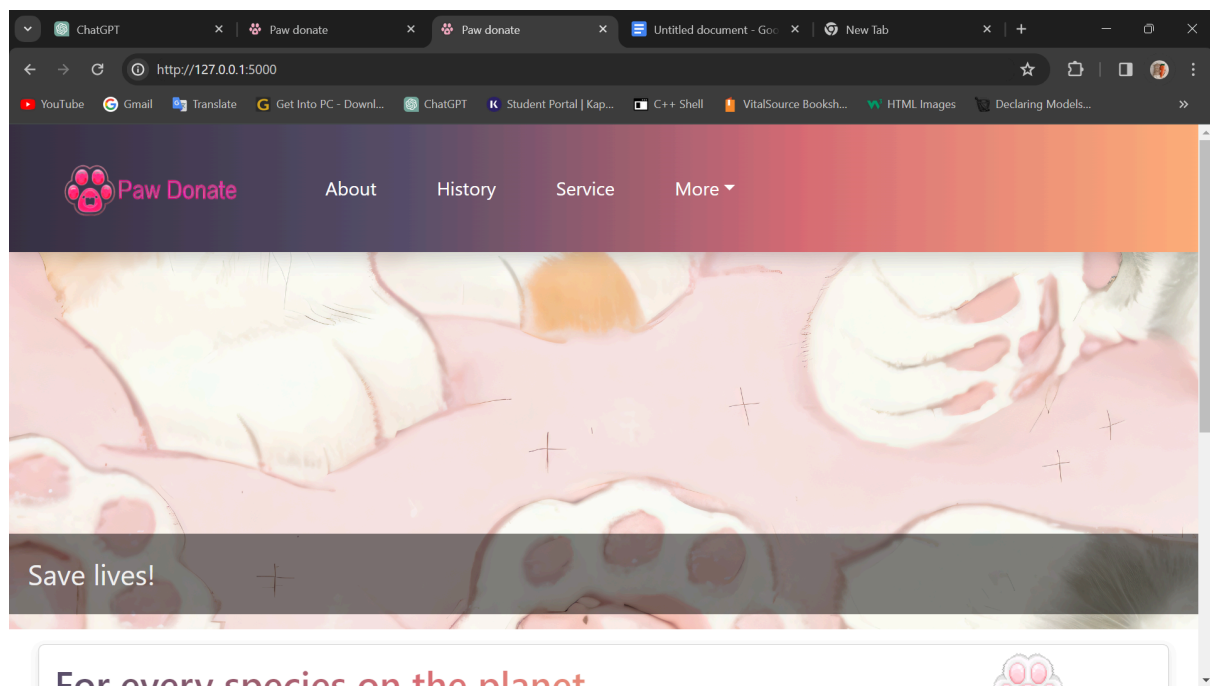
Project plan back to requirements

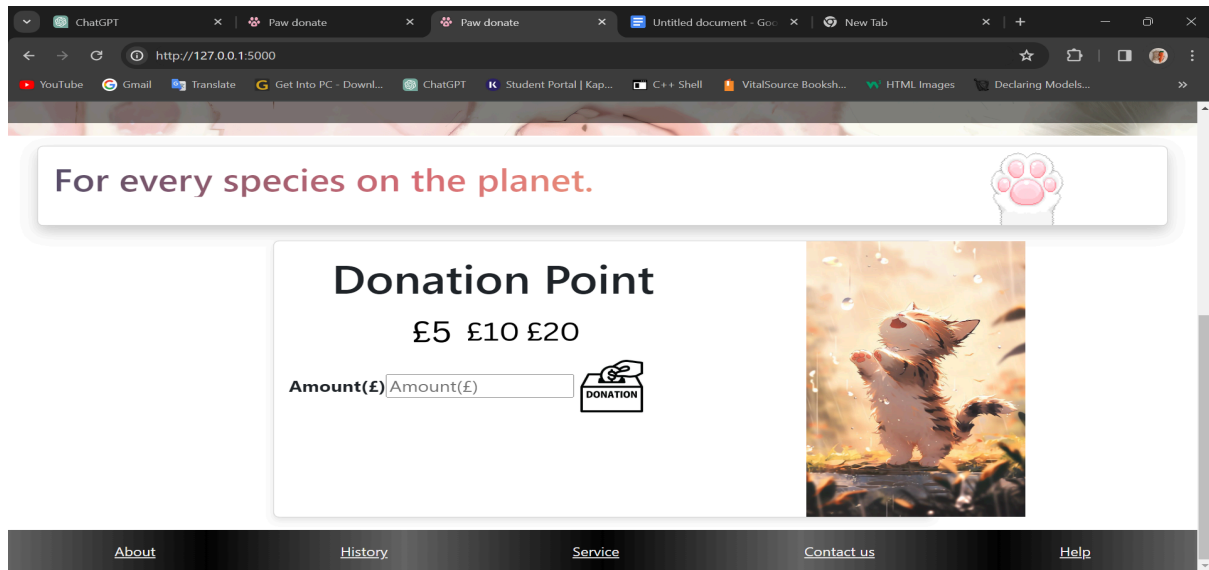
- According to requirements, I created several HTML templates and one base HTML template.
- I used Bootstrap(CSS library) and also included a CSS stylesheet.
- I included Flask routings for each template end-points.
- The web has two models which are 'sign_in' and 'donation' while the front part is used to store and identify users, the later part is used to store the donation datas.
- I also have a JavaScript library which is used to animate some parts of contents.
- The static also has a js file where some functionalities are coded for donation card.

Section 3: Design

Wireframes/mock-ups, both of initial and final designs

- Unfortunately, I forgot to take the image of the initial design without styling and it is now nearly impossible to get an image of that.





– These two are the final designs of the home(base) template where we can see navigation bar, footer, some content and the donation point.

Justify design choices

- I use mild gradient colour as a base to attract users and to sync with cute animal photos and logo names.
- I mainly used card designs because of their flexibility, readability and user-friendly.
- Card designs give the feeling of being attracted and to support that I put some hover effects.
- I mainly used AI generated cute cat images to attract users.

Section 4: Implementation

Implementation process

- The first thing was to code the basic framework (HTML codes).
- And then, I created the app.py to use flask and connect routes to all templates and images.
- After that, I created two models for donation and user datas and I initialised some values for both models.
- At the same time, I created three 'get-post' routes to get the input datas and attached some function to perform within those three routes
- The last one was creating the functionalities for image-buttons in the js file.

Challenges faced and changes made from designs

- There were a lot of challenges and most of them were styling, functions, and flask routes.
- In functions, the process of making image-buttons was so challenging.
- For styling, the challenges were not getting exactly what I wanted and I had to make a lot of changes.
- In flask, the process of making three 'get-post' routes takes more time but eventually, I figured it out.

Section 5: Testing and Integration

Testing procedure

- In testing the most time consuming ones are sign-in, register and donation point.
- The reason was because their functionalities are more complex than others.
- And also for some templates, such as welcome and thanks are not directly connected to the base page and only will appear at certain conditions.
- So, I created some simple links in base.html to test those ones.

Existing and repaired bugs

- For the bugs, I kinda figured out most of them.
- But, in AOS animation, there are still some problems like the animation is not working from time to time.
- I mean animation only works for the first time when you open the page through the link of app.py.
- After that, if you reload the page, the animations do not work again anymore and I am still not able to find the problem.
- Apart from this, I faced some bugs during routing but as I mentioned, I figured it out somehow.
- The other big problem is that the website is not working properly for smaller screens and I cannot figure out how to adjust.

Section 6: Maintenance

Maintenance procedure for future development

- For maintenance, I will check time to time whether the code is still working with new versions of technologies(eg. Updated versions of browsers, code editors and others).

Possible future work

- For first, I wanna do the service which is to provide renting pets services such as pets and dogs.
- Also, I wanna fill up other pages; contact us, help with some certain contents.

In conclusion, although I used a lot of styling, the website seems to be a little odd. The reason may be because of my lack of experience in web development and as this was my first website development.