Pens for High School

- Project idea / users / general information
- Data required for your users
- Database design (complete)
- Website overall layout/design
- Website individual page designs and layout incl. fonts/colours/etc
- Routes (@app.route) required for each page, and related function signatures
- SQL queries for each required route to provide the information from the database that you think you'll need

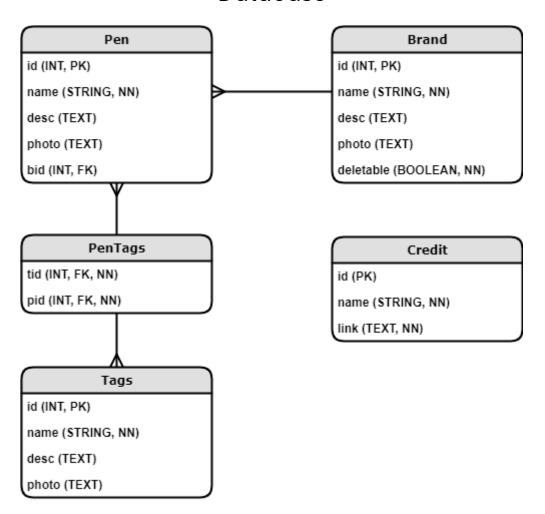
Idea

I am going to make a website about luxury pens. My website will present different types of pens, features, and brands of pen. The purpose of each pen and what they are best used for. The goal of this website is to inform the viewer about different pen and help them make a decision when wanting to buy a new pen. My target audience is luxury pen users and pen enthusiasts.

Some factors that would go into making the decision of which pen to buy would be: pen shape, comfort, material, ink, type, style, thickness, brand, cost, durability, etc.

Possible target audience: office, home, school, artistic, luxury, historic

Database



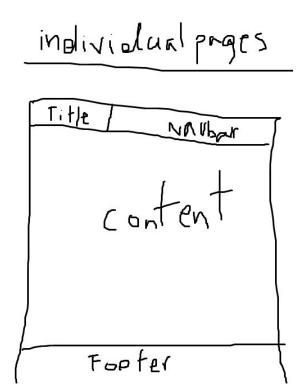
Tags

- Ballpoint
- Permanent
- Gel
- 0.5mm thickness
- 0.7mm thickness
- 1.0mm thickness
- Water-based
- Oil-based

Layout/Design

Initially, I was going to make a classic website with a general homepage which would then navigate to other parts of the website (eg. tags, brand) using links. But I realised, this would make the information on my homepage too similar to the information on the individual pages. So instead, I am going to make an interactive one-page website that contains information on all sections of the website, where then clicking on any item on page the takes the user directly to the specific item (eg. a brand, a pen, or a feature/tag).

The title and navbar will be inline next to each other. The page will have a background image on the landing page. The main content is sectioned off into brands, types and thicknesses. And then followed by the footer. The main content will have images for items which are doubled for flip over info cards. Clicking on the links in the navbar will jump to a location on the website. The types section will have a slideshow of different pen types. And the thickness will just be clickable images of different pen thicknesses.





Routes

- > Home
- ➤ brand/id

- > tag/id
- > pen/id
- > add-brand
- > edit-brand/id
- > delete-brand/id

SQL queries

Navbar:

Clicking on the links in the navbar will direct the user to the location on the page. If the user is not on the homepage, this link will direct them to the homepage and then the specific location.

Brands:

These are presented in rectangle info cards that have the image on the front and click to flip them over to view the information. The user can then click read more to view the brand's individual page with complete information. This page contains all the pens in the database that are created by this brand.

Types:

Types of pens are presented in a slideshow format where there are next and previous arrow keys and the user can click on the content of the slideshow itself to direct them to the individual type of pen page. This page includes all the pens with this type of pen tag.

Thicknesses:

This will be presented in the format shown in the design/layout section where there are example photos, showing the different pen thicknesses and clicking on each photo will take the user to the specific thickness page where they can experiment with writing text. This page includes all the pens with this type of pen tag.

Pen:

This page includes more specific information for a pen model. The page will have the pen's brand, it's tags, cost, description and photo, etc.

Tools

VS Code

I will be using Visual Studio Code as my main code editor/IDE. I made this choice because I am the most familiar with this application and know how to use it's features effectively. I have used VS Community in my game design class for three years now and am experienced with the software. VS Code is similar to that because they are created by the same company, therefore, I can quickly familiarize myself with the application and use my previous knowledge here.

VS Code has some useful features that will help me work efficiently and achieve my goals. There is a source control section which allows me to review changes, commit, edit, revise, and more directly from within the application. This makes the job of version control much easier.

SQLite

Database...

Chrome Inspector

I regularly used Chrome Inspector for debugging purposes. The inspector provides a visual representation of the website layout in code and helps to easier understand the code. This helps often when I am confused about what a certain feature does or how it interacts with my website. The inspector allows for live changes to the website html and css which becomes useful for testing and previewing changes without having to go back to the code editor.

Other

Some helpful websites that I frequently used were CSS Tricks, Stack Overflow and W3 Schools.

Development

Legal, ethical and moral requirements

I added a credits table to the database. The purpose of this table is to hold information about all the content used that is copyrighted or requires crediting of the original author. This includes data such as images used and brand/pen descriptions.

At the current state, the website is at risk of breaching copyright laws. This is because I have only credited the original creators of the content without actually personally consulting with them whether it's okay to use the material. This means that if the website was to go public, these companies have the ability to sue the website. In order for using their content to be legal, I need to individually ask permission for each piece of content I use. But since this is just for a school project and the website will never actually go public, the images and text I have used are just a placeholder and may not be the final outcome. If I wanted to publish this website, I would need to get permission for using all of the text and images shown.

Moral: showing users correct information (not false information)

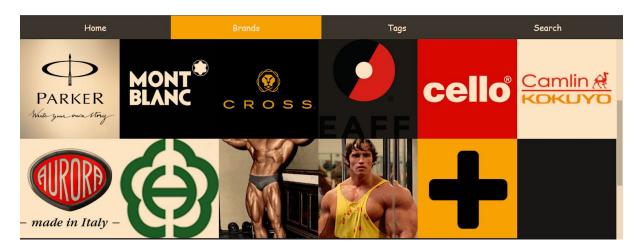
PenTag table modification

I changed my joining table from a complex one to a simple. This is because my joining table does not need to hold any information about the link being made. For example, with a website about movies and actors, the joining table of MovieActor would need to hold information about the role of the actor in the movies, like their character name, so a complex joining table is needed. With my website, the joining table is only there to link pen to tag and no other information is needed to be held in the table. This is why I chose to switch from a complex to a simple joining table. I tested this works by...

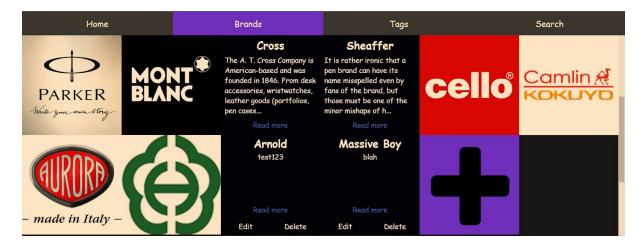
Colour Choice

For my color scheme, I decided to go with a mix of gold and black. Gold because my website is about luxury pens and gold is a suiting color as it represents well.. Gold, richness and prosperity. Another choice would have been purple as it represents mystery and royalty but it looked a little too vibrant. Black is a nice complementary because it is easy on the eye to look at and goes well with almost any other color. Most modern websites

nowadays have a dark theme to ease the eye-strain for late night use and for eliminating blue-light. So I chose this color scheme from schemecolor.com which combines black, gray and gold colour to create a nice palette. I asked a few classmates for feedback on this color choice. They all agreed that golden suits better.



https://www.schemecolor.com/gold-and-black-color-scheme.php/



https://colorpalettes.net/color-palette-2088/

CSS Grid

Hove CSS Grids.

Css Grid is a system for making two dimensional website layouts. Every other option until now has been a one dimensional solution (more like a work-around) such as float, display flex, etc. CSS Grid is different because it contains both rows and columns which gives for so much more freedom.

Testing

Home layout

Created an individual html page for all brands and all tags.

Home page just includes these in the block content.

This means I can also have a dedicated page for all brands/tags.

```
home.html X

templates > <> home.html

1     {% extends 'layout.html' %}

2     {% block content %}

3     {% include 'landing_page.html' %}

4     {% include 'all_brands.html' %}

5     {% include 'all_tags.html' %}

6     {% endblock %}
```

Navbar

Brand Cards

Navlink highlighting

Dynamic screen

Data integrity

Testing things works and proving it. Clicking on a brand will show the correct brand page (screenshot of brand id in database). Is the brand page showing correct number of pens etc.

Access permissions

Who can edit the database? Who can access the database file location?