

NIITANY MARKET README

This is the Flask web application that I built as a final project for a database design course. I was tasked with developing a program with a variety of functionalities that you would find on an online marketplace. These functionalities were a login system, the ability for a user to check their account information and make certain changes (i.e. change password), the ability to browse through a hierarchy of products, and finally, for certain users (approved “sellers”) to be able to list new products on the store page. My application passed with a perfect score for all of these functionalities, and thus I know those operate correctly. There is some other code throughout the project where I began to work on some of the extra credit functionalities (such as creating new accounts), but I cannot guarantee that they are fully-operational. I just wanted to mention this in case you run into some code that doesn’t appear to contribute to the main functionalities or contains a bug. Unfortunately, I no longer have access to the original assignment document, so I imagine there will be a number of questions about parts of the repository that don’t contribute to the final result.

As you read further into this document, I’ll point you to where the relevant code that you actually would want to review is. If you have any questions or issues running the project, feel free to reach out and I’ll respond as soon as possible. Although this project was not necessarily heavy on data science, I think it’s a good demonstration of where I’m at with coding. I’ll be including a separate python project that focuses more on machine learning.

Requirements - list of installed packages (anything used but not included here is already apart of PyCharm Professional which is the IDE I chose to use

- bcrypt v3.2.0
- Jinja2 v3.1.1
- WTForms v3.0.1
- Flask-SQLAlchemy v2.5.1
- Flask v2.1.1
- Werkzeug v2.1.1
- SQLAlchemy v1.4.35
- Email-validator v1.1.3
- Flask-Bcrypt v1.0.1
- Flask-WTF v1.0.1
- Flask-Login v0.6.0
- Imported csv, random, datetime, and sqlite3 for small use cases

The Store Folder - the 'store' folder contains all relevant python scripts, HTML templates, and database files (**this is what I'd ask you to review**)

- **Templates** - holds all HTML templates
 - **Base.html** - base template that sets up the primary navigation bar, support for flash messages, and the overarching design (links to most of the Bootstrap CSS used can be found in here)
 - Each other file in extends base.html and sets up the design as well as some Jinja logic for all other features of the website
- **__init__.py** - allows the project to be referenced as a package (preventing issues such as circular imports) and run from an outside 'start.py' script
- **Database.db** - database for the project (I utilized SQLite viewer to look over this, would recommend instead of printing out all data)
 - **IMPORTANT** - the database file located within the store folder is the correct .db file, NOT the file (of the same name) outside of this folder
- **Forms.py** - contains each of the flask forms utilized throughout the project
- **Models.py** - all of the tables in the database, as well as scripts used to populate the database with the given csv's
 - **IMPORTANT** - the first time you run the site, you will have to un-comment the database population script (large block comments at the bottom of models.py) and run the project. The script is responsible for loading the csv files into the database and it may take a while
- **Routes.py** - main backend of the website, all of the routing and URLs, logic behind each page

Start.py - assuming everything else is in place on your pc, simply run this file to boot up the entire project! Located outside of the store folder

- As mentioned before, the large block comments at the bottom of 'models.py' in the store folder must be removed the first time you run the application
 - This is to load all csv files into the database
- Website is still in debug mode!
- You may login with any user in the Users.csv or create a new one with the Create Account page
- If you want to access the Check Information tab, make sure you are logged in as a User from Users.csv (not a newly created user)
 - I used arubertelli0@nsu.edu with password "TbIF16hoUqGI" as a default buyer
- If you want to access the Manage Product Listings tab (create new listings, track active and previous ones), make sure you are logged in as a seller from the Sellers.csv (you'll need their password from the Users.csv)
 - As a default, I have avirr66@nsu.edu with password "HRzpSI" as a seller

- Within the Store tab, you can always click on 'Root' to remove all active filters on the products being listed
- The store tab currently does not list anything with a quantity of 0!