Changes:

1. Shifted the whole project to Python (Flask).
2. Created “layout.html” for all html files. Basically, all other html files extend from the “layout.html”. It contains <head> tag, nearly all libraries and a navigator.
   1. Don’t forget to include these two tags when creating new html file

A close up of a screen

Description automatically generated

<! -- HTML code here -->

A close up of a sign

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1. Created a database (SQLite instead of MySQL). See “models.py”.
2. Implemented login/logout and register.
3. Implemented password hashing.
4. Implemented login authentication.

# Run the application (for the first time):

Since our project now is a Flask project, all html files are directly rendered by “routes.py”. Opening html files is no longer working.

1. First install:
   1. Python3
   2. pip (probably is pip3)
   3. virtualenv
2. Create a virtual environment in source directory
3. Activate the virtual environment: *source ../bin/activate*
4. Install all packages used in this project, “requirements.txt” has all package names: pip install -r requirements.txt or pip3 install -r requirements.txt
5. Run the application: python run.py
6. If result is like below, it means it’s working

A screenshot of a cell phone

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1. Go to <http://127.0.0.1:5000> (localhost)

**Hints**: Activate the virtual environment whenever you start to work on the project.

# Regenerate the database:

If you had any problem with the database ‘site.db’, follow these steps:

1. Manually delete ‘site.db’
2. Open terminal on the source folderA close up of a logo

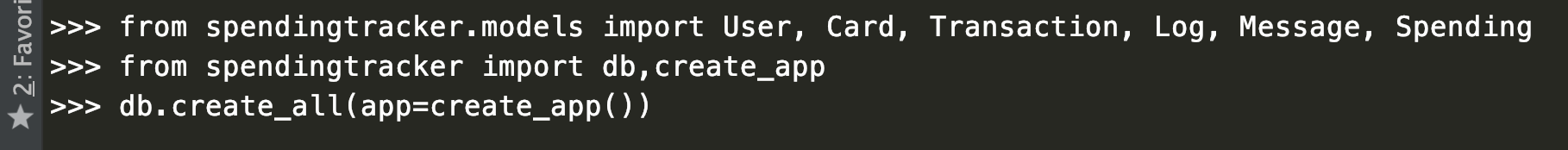
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3. Open Python Shell by typing in ‘python’ A screenshot of a cell phone

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4. Import modules with the following commands in python:

*from spendingtracker.models import User, Card, Transaction, Log, Message, Spending*

*from spendingtracker import db,create\_app*

*db.create\_all(app=create\_app())*

*exit()*

1. Create a new dbA screenshot of a computer screen

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2. Ignore warnings. New ‘site.db’ is created in ‘spendingtracker’ directory.

# Update the virtual environment:

Don’t know whether ‘pycharm’ or ‘phpstorm’ will automatically update package installation, but if you are not sure and can’t run the ‘run.py’, please update the python virtual environment:

1. Open terminal in the source folderA close up of a logo

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2. Activate your virtual environment. I use pycharm so whenever I open the terminal, virtual environment will be opened automaticallyA close up of a screen

   Description automatically generated
3. Install necessary packages by running the command: **pip install -r requirements.txt**A screenshot of a cell phone

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Helpful tutorials:

<https://flask.palletsprojects.com/en/1.1.x/quickstart/#quickstart>

<https://www.youtube.com/watch?v=MwZwr5Tvyxo&list=PL-osiE80TeTs4UjLw5MM6OjgkjFeUxCYH>