

CISC 327 GROUP-51 readme first

How to run payment feature program and test cases (Sungmoon Choi):

- Change the directory to Payment directory inside Assignment-2

```
C:\Stuff>cd C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment
```

- `C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment>_`

- Create a virtual environment (this command is using Windows, the command is different depending on the operating system)

```
C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment>virtualenv venv
created virtual environment CPython3.12.1.final.0-64 in 183ms
creator CPythonWindows(dest=C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment\venv, clear=False,
no_vcs_ignore=False, global=False)
seeder FromAppData(download=False, pip=bundle, via=copy, app_data_dir=C:\Users\Sungpoon\AppData\Local\pypa\virtualenv)

added seed packages: pip==24.2
activators BashActivator,BatchActivator,FishActivator,NushellActivator,PowerShellActivator,PythonActivator
```

- activate the virtual environment

```
C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment>venv\Scripts\activate
(venv) C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment>_
```

- Using pip to install the required packages

```
(venv) C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment>pip install -r requirements.txt
Collecting Flask (from -r requirements.txt (line 1))
  Using cached flask-3.0.3-py3-none-any.whl.metadata (3.2 kB)
Collecting Werkzeug>=3.0.0 (from Flask->-r requirements.txt (line 1))
  Using cached werkzeug-3.0.4-py3-none-any.whl.metadata (3.7 kB)
Collecting Jinja2>=3.1.2 (from Flask->-r requirements.txt (line 1))
  Using cached jinja2-3.1.4-py3-none-any.whl.metadata (2.6 kB)
Collecting itsdangerous>=2.1.2 (from Flask->-r requirements.txt (line 1))
  Using cached itsdangerous-2.2.0-py3-none-any.whl.metadata (1.9 kB)
Collecting click>=8.1.3 (from Flask->-r requirements.txt (line 1))
  Using cached click-8.1.7-py3-none-any.whl.metadata (3.0 kB)
Collecting blinker>=1.6.2 (from Flask->-r requirements.txt (line 1))
  Using cached blinker-1.8.2-py3-none-any.whl.metadata (1.6 kB)
Collecting colorama (from click>=8.1.3->Flask->-r requirements.txt (line 1))
  Using cached colorama-0.4.6-py2.py3-none-any.whl.metadata (17 kB)
Collecting MarkupSafe>=2.0 (from Jinja2>=3.1.2->Flask->-r requirements.txt (line 1))
  Using cached MarkupSafe-3.0.2-cp312-cp312-win_amd64.whl.metadata (4.1 kB)
Using cached flask-3.0.3-py3-none-any.whl (101 kB)
Using cached blinker-1.8.2-py3-none-any.whl (9.5 kB)
Using cached click-8.1.7-py3-none-any.whl (97 kB)
Using cached itsdangerous-2.2.0-py3-none-any.whl (16 kB)
Using cached jinja2-3.1.4-py3-none-any.whl (133 kB)
Using cached werkzeug-3.0.4-py3-none-any.whl (227 kB)
Using cached MarkupSafe-3.0.2-cp312-cp312-win_amd64.whl (15 kB)
Using cached colorama-0.4.6-py2.py3-none-any.whl (25 kB)
Installing collected packages: MarkupSafe, itsdangerous, colorama, blinker, Werkzeug, Jinja2, click, Flask
Successfully installed Flask-3.0.3 Jinja2-3.1.4 MarkupSafe-3.0.2 Werkzeug-3.0.4 blinker-1.8.2 click-8.1.7 colorama-0.4.6
itsdangerous-2.2.0
```

- now run app.py to start the program

```
(venv) C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment>python app.py
* Serving Flask app 'app'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 184-167-329
```

- typing <http://localhost:5000/> into the browser will load the website for payment feature

The screenshot shows a web browser window with the address bar set to `localhost:5000`. Below the browser window is a payment form. The form has the following elements:

- Email:** A text input field with the placeholder text "Email".
- Card information:**
 - Select Payment Method:** A dropdown menu.
 - Card Number:** A text input field with the placeholder text "XXXX XXXX XXXX XXXX".
 - MMYY:** A text input field for the expiration month and year.
 - CVC:** A text input field for the Card Verification Code.
- Name on card:** A text input field with the placeholder text "Name".
- Country or region:** A dropdown menu with "Country" selected.
- Amount:** A text input field showing "Pay CAD \$1244.13".
- Buttons:** "Pay" and "Cancel" buttons.

- from here, you can manually test by inputting information as written in database.txt (note that name is written in lower case with no space, this is because program is made to interpret name input as such, for example, "John Smith" will be interpreted as "johnsmith")

```
database.txt X
1 debit 1111111111111111 0125 001 johnsmith CA 1300
2 credit 2222222222222222 0226 002 johnsmith CA 1500
3 visa 3333333333333333 0327 003 johnsmith US 2000
4 master 4444444444444444 0428 004 johnsmith US 3000
5 debit 5555555555555555 0529 005 johnsmith CA 900
```

- or to run the test case, run the command “python -m unittest discover -s tests”

```
(venv) C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment>python -m unittest discover -s tests
.....
-----
Ran 11 tests in 0.001s

OK
```

(note that 11 tests include both success and fail cases)

fail cases are tested by ensuring that no balance is returned if any of the information is incorrect, thus returning an error message on the website