Refactoring Python Web Application using the Flask framework and sqlite DAOs

CS324 Advanced Programming

Refactor your web-based email application using:

* the Model/View/Controller design pattern
* the Data Access Object (dao) pattern
* the flask framework
* the sqlite dao pattern

Each web page generated by the flask framework should have:

* a method in the flask python program that corresponds to the controller for the web page (in the bookvoterflask program this is the bookvoter.py file)
* an html file in the templates directory that corresponds to the view for the web page

Your data stores should be encapsulated using the Data Access Object design pattern… each DAO should have:

* a model python file that represents data you want to manipulate and display (e.g. User.py class)
* a DAO python file that encapsulates the mechanism for data store and manipulation (e.g. UserDao.py class file).
* a database file that encapsulates the data store (e.g. user.db file)

For both the flask and sqllite DAO design patterns use this code as a model:

<http://web.stonehill.edu/compsci/cs324/Python/bookvoterflask.tar>

Finally… clean up your code. Use meaningful variable names, organize statements in each method, add useful comments… make your code beautiful so that it is easy to read and easy to maintain.

YOUR GRADE FOR THIS PROBLEM WILL BE BASED PRIMARILY ON WELL WRITTEN CODE THAT USES FLASK AND SQLITE

FLASK PROJECT GOTCHAS (PLEASE READ):

* email.py: do not name a python file email.py or Email.py, flask uses these names internally and will get confused if you define your own version of these files. If you do name a python file email.py or Email.py, then you will get a flask import error. You must rename your .py files AND do an “rm \*.pyc” in your project directory to remove any compiled version of the email.py or Email.py files.
* css: create a subdirectory called “static” inside your project directory. This is where your css should be stored. In your template html insert this link in the <head> element:

<link rel = 'stylesheet'  href = "{{ url\_for('static', filename='index.css') }}" />