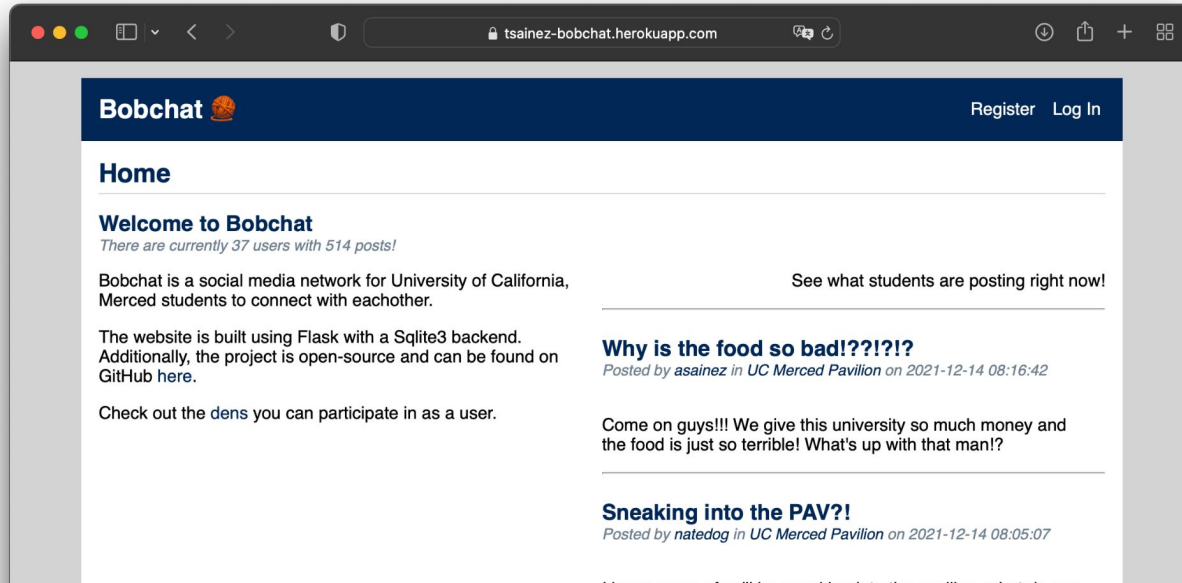


Bobchat

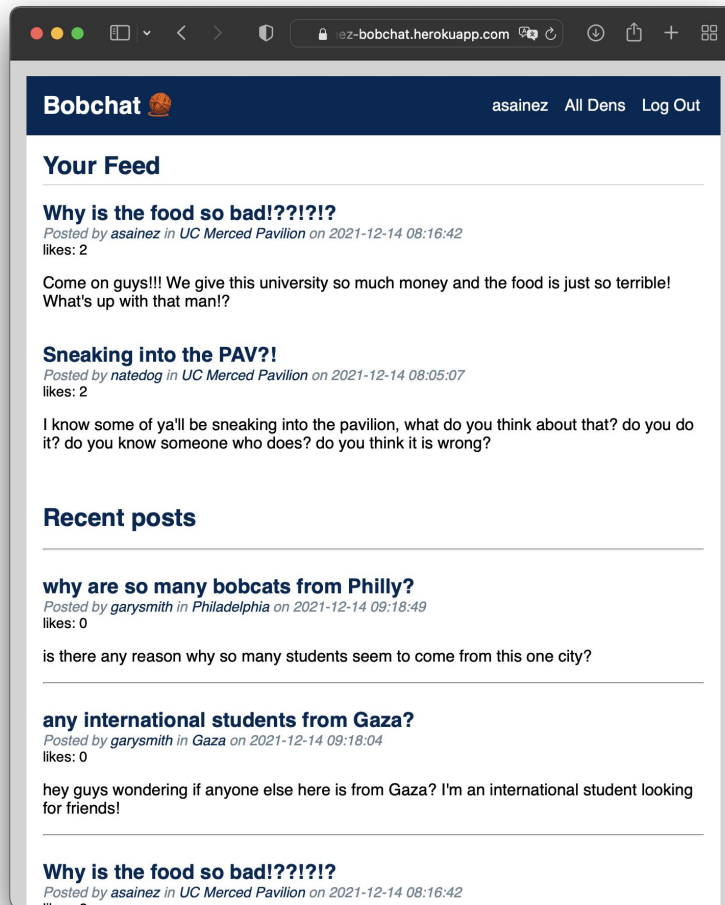
A social media network for
the University of California, Merced 

Interactive Reddit-like social media website

- Users can make posts in dens, like and comment on posts, and make all new dens (communities) to follow and share!



View your personalized feed



<interactive demo>

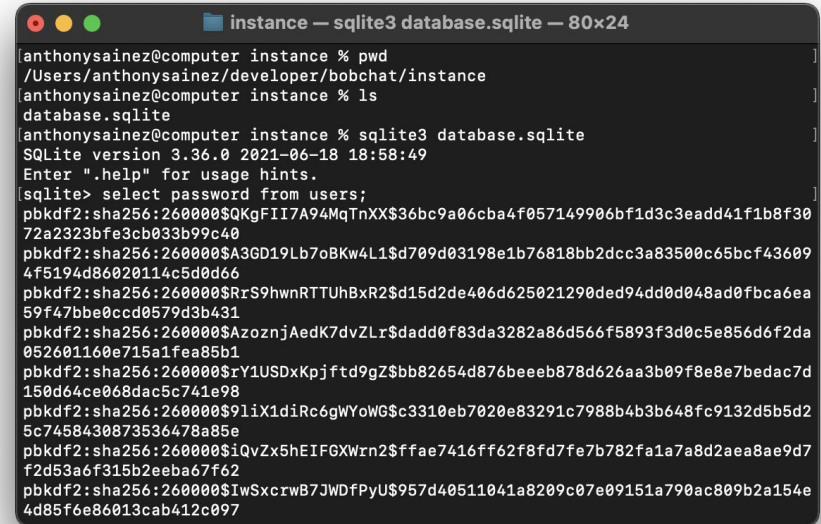
Front-end handled by Flask

- used several Patterns for Flask
 - Flask application is managed by a [Flask Application Factory](#).
 - Pages with similar themes are handled by [Blueprints](#), which makes routing for rendering the associated content from templates easier.
- Python WSGI HTTP server handled by [Gunicorn](#) for production, [Werkzeug](#) for development.



Backend handled by Python's 'sqlite3' library

- One Python file, `db.py` provides a way to initialize and handle a connection to the sqlite database.
 - Provides you with a database connection object, with which you can execute SQL queries directly and commit changes.
 - Results of SQL queries can be retrieved and stored in the Python environment and redirected to the front-end Flask framework for rendering HTML templates.
 - SQL queries are automatically sanitized by Flask, so SQL-injection attacks are not possible.
 - Passwords are automatically **salted and hashed**, and authenticating users and handling sessions is secure.

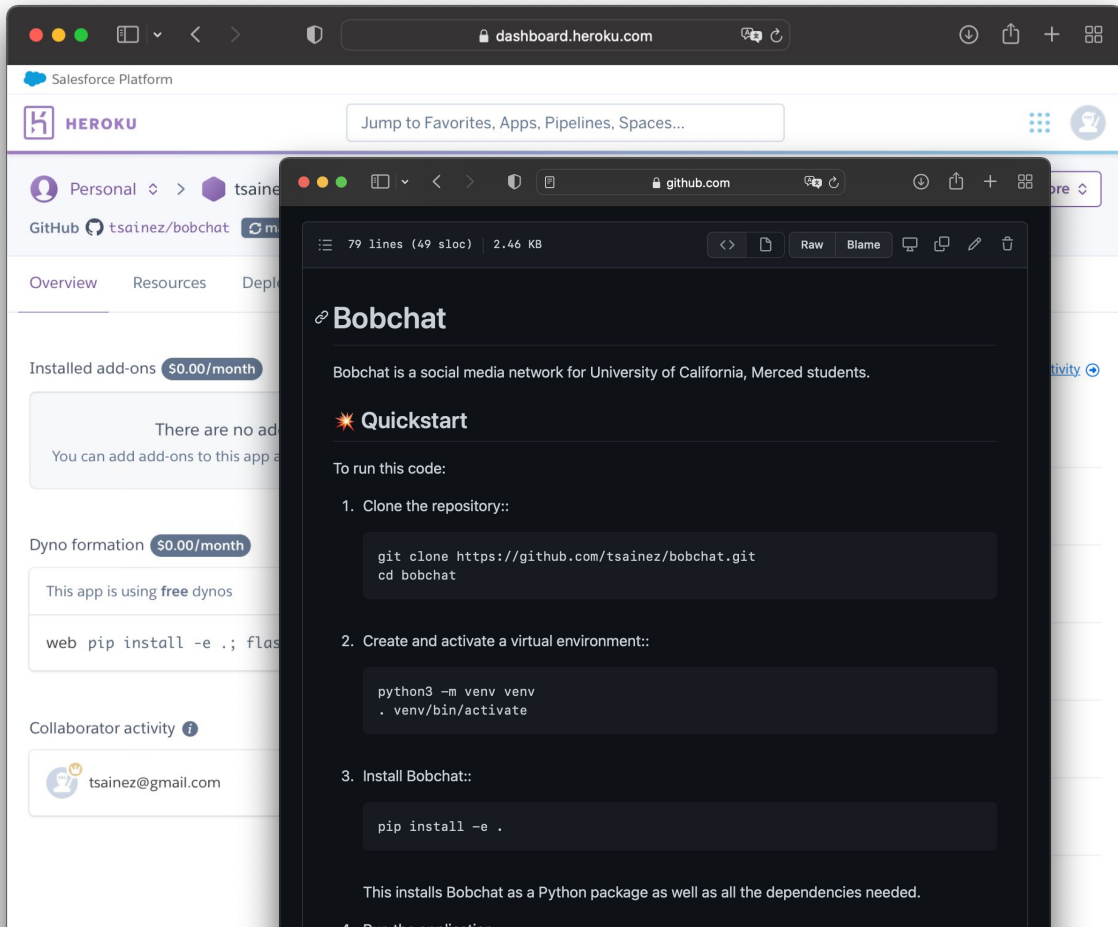
A terminal window titled "instance — sqlite3 database.sqlite — 80x24" showing a series of commands and their outputs. The user is at the prompt "anthony@sainez@computer instance %". They run "pwd" and get "/Users/anthony@sainez/developer/bobchat/instance". They run "ls" and get "database.sqlite". They run "sqlite3 database.sqlite" and get "SQLite version 3.36.0 2021-06-18 18:58:49" and "Enter ".help" for usage hints.". They run "sqlite> select password from users;" and get a list of 10 rows of SHA-256 hashes. The hashes are: pbkdf2:sha256:260000\$QKqFII7A94MqTnXX\$36bc9a06cba4f057149906bf1d3c3eadd41f1b8f3072a2323bfe3cb033b99c40, pbkdf2:sha256:260000\$A3GD19Lb7oBKw4L1\$d709d03198e1b76818bb2dcc3a83500c65bcf436094f5194d86020114c5d0d66, pbkdf2:sha256:260000\$RrS9hwnRTUUhBxR2\$d15d2de406d625021290ded94dd0d048ad0fbcac6ea59f47bbe0ccd0579d3b431, pbkdf2:sha256:260000\$AzoznjAedK7dvZLr\$dadd0f83da3282a86d566f5893f3d0c5e856d6f2da052601160e715a1fea85b1, pbkdf2:sha256:260000\$Ry1USDxKpjftd9gZ\$b82654d876beeb878d626aa3b09f8e8e7bedac7d150d64ce068dac5c741e98, pbkdf2:sha256:260000\$9liX1diRc6gWYoW0\$c3310eb7020e83291c7988b4b3b648fc9132d5b5d25c7458430873536478a85e, pbkdf2:sha256:260000\$IqVz5hEIFGXWn2\$ffae7416ff62f8fd7fe7b782fa1a7a8d2aea8ae9d7f2d53a6f315b2eaba67f62, pbkdf2:sha256:260000\$IWScrwB7JWDFPyU\$957d40511041a8209c07e09151a790ac809b2a154e4d85f6e86013cab412c097.

```
instance — sqlite3 database.sqlite — 80x24
anthony@sainez@computer instance % pwd
/Users/anthony@sainez/developer/bobchat/instance
anthony@sainez@computer instance % ls
database.sqlite
anthony@sainez@computer instance % sqlite3 database.sqlite
SQLite version 3.36.0 2021-06-18 18:58:49
Enter ".help" for usage hints.
sqlite> select password from users;
pbkdf2:sha256:260000$QKqFII7A94MqTnXX$36bc9a06cba4f057149906bf1d3c3eadd41f1b8f3072a2323bfe3cb033b99c40
pbkdf2:sha256:260000$A3GD19Lb7oBKw4L1$d709d03198e1b76818bb2dcc3a83500c65bcf436094f5194d86020114c5d0d66
pbkdf2:sha256:260000$RrS9hwnRTUUhBxR2$d15d2de406d625021290ded94dd0d048ad0fbcac6ea59f47bbe0ccd0579d3b431
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pbkdf2:sha256:260000$Ry1USDxKpjftd9gZ$b82654d876beeb878d626aa3b09f8e8e7bedac7d150d64ce068dac5c741e98
pbkdf2:sha256:260000$9liX1diRc6gWYoW0$c3310eb7020e83291c7988b4b3b648fc9132d5b5d25c7458430873536478a85e
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pbkdf2:sha256:260000$IWScrwB7JWDFPyU$957d40511041a8209c07e09151a790ac809b2a154e4d85f6e86013cab412c097
```

Hosted on Heroku

Since Bobchat is installable as a Python package, installing dependencies is easy and running the project on other machines is easy.

It is open-source and available on [GitHub](https://github.com) with extensive documentation, and automatically deployed to [Heroku](https://heroku.com).



<code demo>