Quacker

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Design Document - CMPUT 291 Mini Project 1

2024-11-14

1 Overview and User Guide

Running the Application

1. **Compile the Application:**
   Use the provided `Makefile` to compile the code by running:

   ```
   make
   ```

2. **Start the Application:**
   Execute the application with a database filename:

   ```
   build/quacker <database_filename>
   ```

   Example:

   ```
   build/quacker test/test.db
   ```

3. **Interacting with the Application:**
   Upon launch, the application displays the main start page, providing options for interacting with Quacker .

2 Software Design

Quacker can be seperated into three essential components...

3 Testing Strategy

In testing this program the Python script *populate_db.py* was used repopulate the testing database with new unqiue data improving the manually typed tests ran on the project and increasing the number of tested edge cases. To generate simply run:

```
python3 test/populate_db.py
```

The script should then return the data of a randomly generated user. This is to make it easier to locate a valid login to use when entering the program. Example:

```
Random User Data:
User ID: 53
Name: Deborah Scott
Email: jasminchang@example.com
Phone: 4567624481
Password: E1AjR1ib*t
SUCCESS! Database populated with random test data.
```

The test script also allows you to easily change parameters regarding the generated data. These can be located in the defintion of *populate_db()* and are self-explanitory as seen below:

```
def populate_db(db_name, user_count=100, tweet_count=500, list_count
   =200, follow_count=300):
```

When it came to testing the application, this was done manually due to the page centric format of our user interface. The felxibilty of testing manually allowed our team to catch unique edge cases that may have passed over an automated system.

4 Group Work Breakdown

We give all credit to Allah SWT, all success comes from Him alone.