

CMPUT291 MiniProject 2 Report

User Guide

The program is run using the command: `python3 main.py 27017`

As well as: `python3 phase1.py` for phase one separately

- (1) Upon entering the program, the user can choose to either log in, in which case they will be asked to enter the username they will log in with. Or enter as a guest(no username)
- (2) After logging in the user will be at the main screen. Following the numbers on the screen, the user can input one to do the following:

Post a question, search for questions, or vote
- (3) Post a question – if the user chooses to post a question, they will be instructed to write the necessary fields (title, body, tags). Upon completion the user will be brought back to the main menu
- (4) Vote – the user simply needs to select the vote option
- (5) Search for questions – the user is prompted to enter space separated keywords. The user will be prompted to choose a selection from the printed posts matching their keywords according to user id. Invalid entries return the user to the main menu.
- (6) Answer question - After searching for a question(see 5) and selecting one, the user can answer the question, or list answers. If the user chooses to answer the question, they will have to fill out the necessary answer fields prompted by the system.
- (7) List answers – If the user chooses to list answers instead, they will get a list of answers specific to the question selected previously. In this case, they have the option to vote for the answer
- (8) To exit, the user selects the exit option from the main menu.

Detailed design of software

Our components are split into different .py files. Each encapsulates a single functionality in the code according to the specification(ie. postQuestion.py, searchPosts.py, actionListAnswers.py). Each python file contains a single function that handles the functionality pertaining to it's name, along with helper functions to keep code clear.

main.py – the entry point of the program, all other functionality will loop back to main.

enterProgram.py – a handler for the login functions redirected from main.py

action_postQuestion.py – posts a question to the database, can be selected from main.py

action_answerQuestion.py – is selected as an option from searchPosts.py, functionality is answer questions.

searchPosts.py – selected from main.py, and searches for questions as it says in the spec.

action_vote.py – votes for a post, can be selected from searchPosts.py

answer_listAnswers.py – lists the answers pertaining to a question, can be selected from searchPosts.py

Testing Strategy

Our testing strategy was to use a single representative case for each piece of functionality that was required by the specification. (ie. To post a question, we would create one post with all fields filled, then another with no tags). We accounted for errors by testing out-of-bounds values for each user input. Using MongoDBCompass, we were able to check our results to see if they were added to the database.

Work Group Strategy

Each of our group members spent roughly a day on the project(12hrs). The delegation of work was as follows: Vinny did phase 1 and search for questions, Jia did login and post a question, and Dohyun did question action-answer, list answers, and vote. To keep the project on track, we used WhatsApp and Github.

