



This is the state diagram for the roommate finder application. On the left is a general overview of the basic flow of a program. On the right is for the states involved with answering survey questions which is involved in the personal and roommate survey states. The general state diagram starts with the user successfully logging in. From there the program will exist in the survey hub state which acts as a bridge for the three other survey states. Once the three states have been completed by the user, the program can then transition into the grading roommates state which is guarded by the value of completed surveys. The end state is achieved by passing through the get contact info state completing the program. The survey question diagram starts by displaying a question to the user, from there it passes onto the answer state which gets an answer from the user. This state contains a self-loop meaning the user can select a different answer if one has already been collected. Alternatively, if the user wishes to not answer a question, then the skip question state followed by the next question state. If the number of questions answered is not less than the number of total questions in the survey then the exit state will be achieved. Otherwise, the next question state returns to the display question state and the value of the variable responsible for tracking the number of answered questions will be increased by 1.