

COLLEGE CONNECT

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PROGRESS REPORT 2

OCT 15TH - NOV 1ST 2021

Over the last couple of weeks, we have been working on getting all of the classes and methods ready to be tested and in working order for the program. Matt has been busy working on the fileIO class as well as the design of the program, and interfaces to make sure the program is running the way we had planned. Tyler has been working on the main method and runner class to help build a foundation for the code to run on. Jackson has been working on the Club Class while Erin has been working on the Person class

PROJECT SCHEDULE

NOVEMBER 1ST, 2021 - ALL CLASSES FINISHED, START OF PHASE 1 TESTING
NOVEMBER 10TH - END OF PHASE 1 TESTING, START OF PHASE 2 TESTING
NOVEMBER 20TH - END OF PHASE 2 TESTING, START OF PHASE 3 TESTING
DECEMBER 1ST - END OF PHASE 3 TESTING, PROJECT IS DUE.

INTENDED TEST PLAN

PHASE 1 (NOV 1ST - NOV 10TH, 2021) TEST THE CORE COMPONENTS OF THE PROGRAM - MATCHING WITH POTENTIAL ROOMMATES, FINDING CLUBS AND FRIENDS, EDITING ACCOUNT INFORMATION, AND DELETING ACCOUNTS. IN ADDITION, TEST SECURITY TO MAKE SURE OTHER USERS' INFORMATION CANNOT BE ACCESSED FREELY.

PHASE 2 (NOV 10TH, 2021 - NOV 20TH, 2021): DEVELOP FURTHER ADDITIONS TO THE PROGRAM AND TEST AS THEY ARE COMPLETED. THIS INCLUDES FEATURES LIKE USING A DATABASE OR UI.

PHASE 3 (NOV 20TH, 2021 - DEC 1ST, 2021): FINAL TESTING - RETESTING EVERYTHING FROM PHASE 1 AND PHASE 2 TO ENSURE A SMOOTH USER EXPERIENCE.

SYSTEM ARCHITECTURE

When the user first launches the program, they will be greeted by a login screen. In the background, code will be running to create ArrayLists containing all the profiles and clubs. When a user enters their login information, the program will search through the list of profiles until it comes across a profile that has the matching credentials, and this profile will then be assigned in the program as the current user. If a user does not yet have a profile, there will be a prompt to create one.

The user will then be greeted by the main menu screen where they will have different options depending on what they want to do. There will be options to edit account information, delete their account, match with a new potential roommate, find friends, or discover clubs.

Choosing to match with a potential roommate will then display other profiles that the program thinks would be a good fit for the user. The user will be able to cycle through profiles, and if they find a profile, they think might be a good fit, they can send a message to that other user.

The find a friend option works similarly to how finding a roommate does, except there is less emphasis on finding a "good fit". Things like hobbies and major can still factor into who is recommended, but not as heavily.

Edit account information will allow the user to edit information about their account. They will be prompted about the different options available to edit, and every edit will be parsed to make sure it is the proper data type to prevent scenarios such as trying to assign a string to an int. In the backend, the user input will be formatted in the proper way, and their file will be updated accordingly to reflect the changes.

The delete account option will delete the user's account, removing their file, and their id number from the profileIdList.

The discover clubs' option will list clubs that might be of interest to the user. This will be determined by seeing if anything in the user's account matches up with certain keywords for each club. The user will also have an option to view a full list of the clubs as well, and this will not be organized based on matching interests.

In each menu will be an option to return to the main menu. From the main menu, the user will be able to choose the logout option, which will terminate the program.

RELATIONSHIP BETWEEN CLASSES AND SYSTEM FEATURES

FileIO class – Handles most of the backend work being done in the program. Every method and important attribute from the class is static so the class will never be instantiated into an object. This class primarily interacts with the Runner class, which will call methods from FileIO. The FileIO class will read from files for the program and create instances of the Person and Club class and create ArrayLists for each class, which will then be accessed by the Runner class.

DATABASE DESIGNS

CURRENTLY, THE PROJECT IS BEING DEVELOPED USING JUST FOLDERS AND FILES. IN THE FUTURE, IF TIME PERMITS, WE WOULD LIKE TO SWITCH OVER TO USING A SQL DATABASE.

CURRENTLY, THE STORAGE SETUP LOOKS LIKE THIS:

- PROFILES
 - PROFILE1
 - PROFILE1.TXT
 - PROFILE2MESSAGE.TXT
 - PROFILE3MESSAGE.TXT
 - ETC.
 - PROFILE2
 - PROFILE3
- CLUBS
 - CLUB1.TXT
 - CLUB2.TXT
 - CLUB3.TXT

THE FILLED-IN DOTS REPRESENT FOLDERS, WHILE THE HOLLOW DOTS REPRESENT TEXT FILES CONTAINING INFORMATION.

USER-INTERFACE DESIGN

The current plan is to develop the program to first work on the terminal, which will allow it to run on the terminal, which should allow it to run on anything that supports java and uses terminals

If time permits, we would like to update it to have a GUI version as well and would start out with developing it for Windows.

