

Test 1 – Load Member Data

Show user menu

User is prompted to enter a command

If user enters invalid option

- display error message and show user menu

User enters “m” or “M” to load all members from a file

Program will prompt user for a file name / location

If file name is invalid or does not exist

- throw IOException and show prompt again

File is loaded

Members are loaded

Program outputs number of members loaded

Show user menu

Test 2 – Save Member Data

Show user menu

User is prompted to enter a command

If user enters invalid option

- display error message and show user menu

User enters “s” or “S”

Program will prompt the user for a file name

If file name is invalid

- throw IOException

If file does not exist

- create file

Members are saved to file

Show user menu

Test 3 – List All Members

Show user menu

User is prompted to enter a command

If user enters invalid option

- display error message and show user menu

User enters “L” or “l” File is loaded

Program iterates Membership list

Each member’s data is output to the console

Show user menu

Test 4 – Add Member

USER inputs [A] at Main Menu

Program asks for first name, last name, year, and MEID

Program checks for matching MEID in Existing Users

Program Adds/Updates Member in Membership list

Program outputs Main Menu

Test 5 – Remove Member

USER inputs [R] at Main Menu

Program asks for an MEID

User inputs MEID

Program iterates Membership List

Program removes Member from Membership list or Member Not Found Exception

Program outputs Main Menu

Test 6 – Display Member Data

USER inputs [D] at Main Menu

Program asks for MEID

User inputs MEID

Program Iterates Membership List

Program outputs Member data OR throws Member Not Found Exception

Program shows Main Menu

Test 7 – Add Interest To Member

User inputs [I]

Program asks for MEID

User inputs MEID

Program asks for an interest to be added

User inputs new interest (topic, level)

Program adds interest to member's interest list

Program prompts user to add another interest or quit

User continues or kills the process

Program shows user main menu

Test 8 – User Exits Program

User inputs [Q] at Main Menu

Program checks to see if anything is unsaved

IF YES – Program asks user to save [Y/N]

- IF Y
 - Program Asks For a filename
 - Program Saves Data

Program Exits

Negative Test 1 – Invalid User Input

Program shows user main menu

User inputs "J"

Invalid input exception thrown

Program shows user main menu

Negative Test 2 – Invalid File Name

USER inputs [M]

Program prompts user to enter file name

USER inputs a file name that doesn't exist

Program throws exception; displays to the user "File could not be found. Please try again."

Program prompts user to enter a file name; looped until valid File name is entered