Test Cases

Black-Box Test Cases

These test cases are defined based on the available documentation and execution of the program. The code was not inspected.

| # | Test case (very brief description) | Preconditions (any required setup) | Test steps (steps executed during testing) | Expectation | Observation ("pass" or failure description) |
|---|---|---|--|--|--|
| 1 | Test the changing habits functionality (renaming title) (GUI) | Existence of user Existence of a habit | Click change habit, rename title, click change habit | Habit title is changed on the spot without adding a new habit | Failure (a new habit was added to the main screen, only after restarting the old habit disappears) |
| 2 | Test the changing habits functionality (change frequency) (GUI) | Existence of user Existence of a habit | Click change habit, change frequency and weekdays, change habit | The frequency of habit and the days are adapted | Failure (Frequency adapts but the days are not saved) |
| 3 | Test the weekdays when creating a new habit (GUI) | Existence of user | Add new habit, select title and weekdays, save, change habit to see settings | Settings are the same as created before, habit only shows on those dates | Failure (weekdays do not save + habit always shows) |
| 4 | Test the change habit button when no habits are there (GUI) | Existence of user | Click change habit | Nothing happens, no errors | Failure (shows error) |
| 5 | Test creating new User (GUI) | - | Click create new User, choose username | New User gets created | pass |
| 6 | Test creating new habit for new User (GUI) | - | Create new User, Click add new Habit, fill out Name, Description, | Habits appear in List | Habits sometimes do not appear, only appear after restarting the |

| | | | | | application (inconsistent) |
|----|--|---------------------|--|---|--------------------------------------|
| 7 | Test creating new habit for existing User (GUI) | Selected User | Click add new Habit, fill out form | Habit appears in List | pass |
| 8 | Test changing selected User (GUI) | 2 different Users | Click change User, select other User | Switches selected User to new User | pass |
| 9 | Test Habit deletion (GUI) | User with Habits | Click delete Habit, select Habit to delete, click ok | Habit disappears from List | pass |
| 10 | Test User deletion (GUI) | User | Click delete current User | User gets deleted | pass |
| 11 | Test Habit deletion without Habits (GUI) | User without Habits | Click delete Habit | Information dialog pops up | pass |
| 12 | Test User deletion without selected User (GUI) | - | Have no User selected, click delete current User | Information dialog about not having a User selected pops up | No indication that anything happened |
| 13 | Test creating or changing a Habit without selected User | - | Have no User selected, click on add new Habit or change Habit | Information dialog about not having a User selected pops up | pass |
| 14 | Test starting to create a Habit on a User but then changing the User | 2 different Users | Have one User selected, click add new Habit, select other User, create Habit | Habit creation stops | Habit gets created for new User |

White-Box Test Cases

These additional test cases were defined during inspection of the code.

| # | Test case (very brief description) | Preconditions (any required setup) | Test steps (steps executed during testing) | Expectation | Observation ("pass" or failure description) |
|---|---|------------------------------------|--|---|--|
| 1 | Test the user creation | Connected Database | Create a test User, give it a name | User gets created and is added to the Database | pass |
| 2 | Test the habit creation for users | Existence of user | Previous steps, create some test habits, add them to a User | Habits get created, habits are added to the user, habits are added to the Database | pass |
| 3 | Test the days of habits that have been done | Existence of done habits | Previous steps, check if habits marked as done show the correct date | Habits done date is correctly set | pass |
| 4 | Test if habits are correctly marked done | Existence of habits | Previous steps, mark habits as done(today) | Habits are correctly marked as done | pass |
| 5 | Test the habit deletion | Existence of habits | Previous steps, delete the test habits | Habits are removed from the User and the Database | pass |
| 6 | Test the user deletion | Existence of user | Previous steps, delete the test User | User gets removed from Database, user can not be accessed from User vector | User does get removed from Database, but not from User vector (addressed in user_del button callback, but not inside user deletion method) |