Team 12 - M9 - Method Contracts

Nathan Lai

`agilepuppers.cleanwater.controller.RegisterScreen->handleRegister()`

Signature: `@FXML private void handleRegister()`

Preconditions: Current screen is `RegisterScreen`. New user has entered in a unique username, a password, and authorization level.

Postconditions: Upon successful registration, a new `UserAccount` is created for the user. The new user is then logged in and the screen changes to the `HomeScreen`. Else the screen stays on `RegisterScreen` if a new user could not be created.

Ridoy Majumdar

`agilepuppers.cleanwater.controller.EditProfile->updateProfile()`

Preconditions:

```
    titleField.getText() != null && nameField.getText() != null
 && emailField.getText != null   && addressField.getText() != null
```

Postconditions:

```
    profile.title.equals(titleField.getText())
 && profile.name.equals(nameField.getText())
 && profile.email.equals(emailField.getText())
 && profile.address.equals(addressField.getText())
```

Gabor Siffel

`agilepuppers.cleanwater.controller.LoginScreen->handleLogin()`

Signature: `@FXML private void handleLogin()`

Preconditions: Current screen is `LoginScreen`. Also, this method should only be called by JavaFX automatically when the user clicks the "Login" button

Postconditions: Current screen is either `HomeScreen` (on a successful login attempt) or remains on `LoginScreen` (on an unsuccessful login attempt); `App.current.user` is now set to the user that just logged in (if successful)

Cal Stephens

`agilepuppers.cleanwater.model.TextDatabase->queryAllEntries()`

Signature: `public List<T> queryAllEntries() throws IOException`

Preconditions: The TextDatabase must be initialized with a file path and a model factory.

Postconditions: If the specified file doesn't exist or cannot be accessed, an `IOException` will be thrown. Otherwise, the method will return a List of model objects as parsed by the database's model factory.

Jeremy Winter

`agilepuppers.cleanwater.controller.LoginScreen->validate()`

Signature: `private UserAccount validate(String username, String password)`

Preconditions: Current screen is `LoginScreen`. This method should only be called by `handleLogin()`.

Postconditions: Upon successful login, `handleLogin` receives the proper user account and sets that as the current user. Otherwise, an error message is displayed.