**My report on what I did in Sprint 4**

Student: Sam Agrawal

Sprint 4 developer (Music App)

Bailey, I know you are team leader for Sprint 4, so here is my information for you to add into your Sprint 4 report when you submit in BrightSpace as follows:

Task: Presentation

Description: Create body section.

Status: 100% complete

Estimated Hours: 2

Actual hours: 2

Developer: Samarth

Task: Continue UI Development

Description: Implement remaining features related to the UI, namely the log-in screen.

Status: In-progress (50% complete)

Estimated Hours: 8

Actual Hours: 16.5

Developer: Samarth

The unexpected factors that caused the delay was that each time I run my section of JavaFX code, which I have wrote on Eli’s DesktopFrontend.java file on IntelliJ IDE, as follows:

**signIn.setOnAction(e -> {**

**if (usernameInput.getText().isEmpty() || passwordInput.getText().isEmpty()) {**

**errorMsg.setText("ERROR: Please enter both, your username and password.");**

**errorMsg.setFont(Font.font("Times New Roman", FontWeight.BOLD, 22));**

**errorMsg.setFill(Color.RED);**

**return;// causes this program to fail to display the main page.**

**}**

**try {**

**if (usernameExists(getConnection("jdbc:h2:~/test;AUTOCOMMIT=OFF;"), usernameInput.getText()) &&**

**passwordValid(getConnection("jdbc:h2:~/test;AUTOCOMMIT=OFF;"), usernameInput.getText(), passwordInput.getText())) {**

**// Now we know both credentials are correct, so the main page will now be displayed.**

**primaryStage.setScene(mainScene);**

**usernameInput.clear();**

**passwordInput.clear();**

**}**

**else {**

**errorMsg.setText("ERROR: Username or password does not exist.");**

**errorMsg.setFont(Font.font("Times New Roman", FontWeight.BOLD, 22));**

**errorMsg.setFill(Color.RED);**

**return; // causes this program to fail to display the main page.**

**}**

**} catch (SQLException ex) {**

**System.out.println(ex.getMessage());**

**}**

**});**

I get a build-failed error, but no syntax errors in his code, in the IntelliJ IDE’s output console:

java: module not found: javafx.base

So due to this error, my local IntelliJ IDE fails to generate JavaFX output window pop-up. Therefore I could not validate username and password (i.e. ensuring that they both exist in the database system). In fact, I was struggling a lot for 8.5 hours more to resolve such errors which failed the IntelliJ IDE to generate a Javafx pop-up box.

Please see Textfile 1: “25Apr12- Sam- Sprint4\_CodeSample.txt” for more information.

Task: JavaFX Login Credentials Improvement

Description: The password characters should be masked (i.e. should be hidden behind full dots or asterisks) so that no other users, especially not hackers etc, can view or even figure out the actual correct password. In addition, this can make the users feel more confident that his/her password is not being inadvertently let out to others, especially in public.

Status: 100% complete

Estimated Hours: 10

Actual hours: 4.5 hours

Developer: Samarth

Please see file 2: DesktopFrontend.java code file.

In that file I did some code modifications as follows. In fact, I was using Apache Netbeans for this:

In lines 23 to 25, I commented these java import statements:

**//import static com.BayWave.Tables.UserTable.passwordValid;**

**//import static com.BayWave.Tables.UserTable.usernameExists;**

**//import static java.sql.DriverManager.getConnection;**

In line 27, I also commented this java import statement line as well:

**//import java.sql.SQLException;**

In lines 50 to 55: I added the following section of code to add a Music Brand logo image on top left corner of the sign-in screen:

**File f = new File("C:\\Pictures\\Music Brand logo.jpg");**

**Image img = new Image(f.toURI().toString());**

**ImageView iview = new ImageView(img);**

**iview.setFitWidth(50);**

**iview.setFitHeight(50);**

**iview.setPreserveRatio(true);**

This is the picture I used:

A white musical note on a blue background

AI-generated content may be incorrect.

In lines 56 to 61, I added the following section of code to display the login title and its description:

**Text loginTitle = new Text("Welcome!");**

**loginTitle.setFont(Font.font("Times New Roman", FontWeight.BOLD, 35));**

**loginTitle.setFill(Color.LIGHTGREEN);**

**Text loginDesc = new Text("Please sign in to continue.");**

**loginDesc.setFont(Font.font("Times New Roman", FontWeight.BOLD, 22));**

**loginDesc.setFill(Color.LIGHTGREEN);**

A blue and green sign

AI-generated content may be incorrect.

In line 65, I added the code:

**usernameInput.setPromptText("Please enter your username here.");**



In line 68, I replaced the data type, TextField, with PasswordField, so that all characters of the real correct password are hidden behind full dots. So the code on this line is now:

**PasswordField passwordInput = new PasswordField();**



In line 69 I added the code:

**passwordInput.setPromptText("Please enter your password here.");**



In line 75 I added the code:

**loginPage.getChildren().addAll(iview, loginTitle, loginDesc, userLabel, usernameInput, passLabel, passwordInput, signIn, errorMsg);**

to put all these elements into the login page.

In lines 228 to 233, at the beginning inside the call to setOnAction function, I added the following section of code to check whether either the username field or password field has been left empty (i.e. the user just entered one of those fields).

**if (usernameInput.getText().isEmpty() || passwordInput.getText().isEmpty()) {**

**errorMsg.setText("ERROR: Please enter both, your username and password.");**

**errorMsg.setFont(Font.font("Times New Roman", FontWeight.BOLD, 22));**

**errorMsg.setFill(Color.RED);**

**return;// causes this program to fail to display the main page.**

**}**

A purple and white striped background

AI-generated content may be incorrect.

(Just clicked on sign-in button while leaving both fields empty)

A purple and white striped background

AI-generated content may be incorrect.

(Just clicked on sign-in button while leaving the password field empty)

A purple and white striped background

AI-generated content may be incorrect.

(Just clicked on sign-in button while leaving the username field empty)

In lines 235 to 253, I commented the try catch code:

**/\*try {**

**if (usernameExists(getConnection("jdbc:h2:~/test;AUTOCOMMIT=OFF;"), usernameInput.getText()) &&**

**passwordValid(getConnection("jdbc:h2:~/test;AUTOCOMMIT=OFF;"), usernameInput.getText(), passwordInput.getText())) {**

**// Now we know both credentials are correct, so the main page will now be displayed.**

**primaryStage.setScene(mainScene);**

**usernameInput.clear();**

**passwordInput.clear();**

**}**

**else {**

**errorMsg.setText("ERROR: Username or password does not exist.");**

**errorMsg.setFont(Font.font("Times New Roman", FontWeight.BOLD, 22));**

**errorMsg.setFill(Color.RED);**

**return; // causes this program to fail to display the main page.**

**}**

**} catch (SQLException ex) {**

**System.out.println(ex.getMessage());**

**}\*/**

In lines 254 to 256, I copied and pasted this section of code from at the end of if-block, which is at end of try-block, to the end of the call to setOnAction method (after the whole try-catch block that I have commented when using Apache Netbeans IDE)

**primaryStage.setScene(mainScene);**

**usernameInput.clear();**

**passwordInput.clear();**

So that after both username and password fields are entered, and after clicking on the sign-in button; then it takes me to the main page:

A screenshot of a computer

AI-generated content may be incorrect.