Student Attendance Tracker

Technical Reference Manual





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# Introduction

## Purpose

At the time of this software’s inception our school (Concord University) handled taking roll either by passing around a roll sheet or by doing roll call. However, this method of taking attendance is time consuming and distracting. We have created this software in an attempt to mitigate the potentially adverse impacts of the taking attendance.

## Description

# File Information

Note that .xaml files contain the UI aspects of each screen and the .xaml.cs files contain the actual functional code. For the sake of simplicity some UI elements (such as simple display labels or images) will not be included here unless they actually do something other than display information.

## Welcome Screen

### Description

The Welcome screen is displayed when the software is first started and when a user either logs out, registers a new account, or cancels their registration or login.

### Files

MainWindow.xaml

MainWindow.xaml.cs

### Functions

|  |  |
| --- | --- |
| **Name** | **Purpose** |
| private void welcomeRegisterButton\_Click(object sender, RoutedEventArgs e) | This function is called when the user clicks on the register button. The function creates a register screen and closes the welcome screen. |
| private void welcomeLoginButton\_Click(object sender, RoutedEventArgs e) | This function is called when the user clicks on the login button. The function creates a login screen and closes the welcome screen. |

### UI Elements

|  |  |  |
| --- | --- | --- |
| **Type** | **Name** | **Purpose** |
| Button | welcomeLoginButton | The purpose of this button is to give the user a simple means of navigating to the login screen. |
| Button | welcomeRegisterButton | The purpose of this button is to give the user a simple means of navigating to the register screen. |

### Possible Errors

As long as the software builds and runs this screen should produce no errors.

## Login Screen

### Description

The login screen is used to retrieve login credentials from the user in order to check to see if the user is registered already and to display their information on the home screen.

### Files

loginScreen.xaml

loginScreen.xaml.cs

### Functions

|  |  |
| --- | --- |
| **Name** | **Purpose** |
| private void loginSubmitButton\_Click(object sender, RoutedEventArgs e) | This function is called when the user clicks the login button. The function checks the database to see if the credentials entered are valid. It can either create a home screen and close this screen or display an error message. |
| private void loginGoBackButton\_Click(object sender, RoutedEventArgs e) | This function is called when the user clicks on the go back button. The function creates a new welcome screen and closes this screen. |

### UI Elements

|  |  |  |
| --- | --- | --- |
| **Type** | **Name** | **Purpose** |
| Button | loginSubmitButton | The purpose of this button is to submit the login credentials entered by the user in order to check against the database to see if they are valid. |
| Button | loginGoBackButton | The purpose of this button is to give the user a simple means of navigating back to the welcome screen. |
| Text Box | usernameTextBox | This textbox simply holds the username value for the user. |
| Password Box | loginPasswordBox | This password box holds the password value for the user. As a built in function of this object it displays the entered in text as dots. |

### Possible Errors

|  |  |
| --- | --- |
| **Error Message/Type** | **Cause** |
| "INVALID CRENDENTIALS! The username / password combination entered is invalid, please try again." | The user entered in login credentials that do not exist within the database. It could be an invalid password, username, or both. |
| Complete software crash | The database that values are checked against is not up and running. A simple connection test will need to be implemented to prevent this from happening. |

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