

Cognex Designer Advanced – Section 2
User Control & Auditing Lab
Approximate Duration: 30 minutes

EXPECTED OUTCOMES:

- Add User Control to the application
- Audit any changes that happen with regards to a new user

EXPECTED VISUAL RESULT:

Timestamp	Username	Action	Message
2/19/2015 11:19:48 AM	miguel	Logging In	Successful
2/19/2015 11:19:49 AM		Logging Out	Successful
2/19/2015 11:21:13 AM	miguel	Logging In	Successful
2/19/2015 11:21:15 AM	miguel	Logging Out	Successful
2/19/2015 12:03:21 PM	miguel	Logging In	Successful
2/19/2015 1:51:51 PM	miguel	Logging In	Successful
2/19/2015 1:57:22 PM	miguel	Logging In	Successful
2/19/2015 1:57:31 PM	miguel	Logging Out	Successful
2/19/2015 1:57:33 PM	miguel	Logging In	Successful
2/19/2015 2:07:08 PM	miguel	Logging In	Successful
2/19/2015 2:08:41 PM	miguel	Logging In	Successful
2/19/2015 2:22:25 PM	miguel	Logging In	Successful
2/19/2015 2:51:11 PM	miguel	Logging In	Successful
2/19/2015 3:10:02 PM	miguel	Logging In	Successful
2/19/2015 3:50:49 PM	miguel	Logging In	Successful
2/19/2015 3:57:01 PM	miguel	Logging In	Successful
2/19/2015 4:00:03 PM	miguel	Logging In	Successful

OUTLINE OF LAB:

1. Add User Control
 - a. Add User Account information
 - b. Add a login page to come up at start-up
 - c. Display on main page the current user logged in
2. Reset to default user after 1 minute of inactivity
 - a. Add an Inactivity Monitor
3. Add Audit Trail for changes in User Account
 - a. Display table on Login Screen

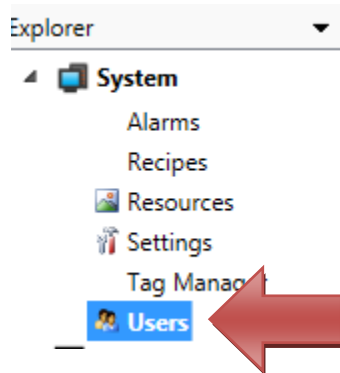
Challenge: Add Audit Table to a separate page that pops up from a button on the login page. Only certain levels can see the Audit Table.

Steps for the Lab:

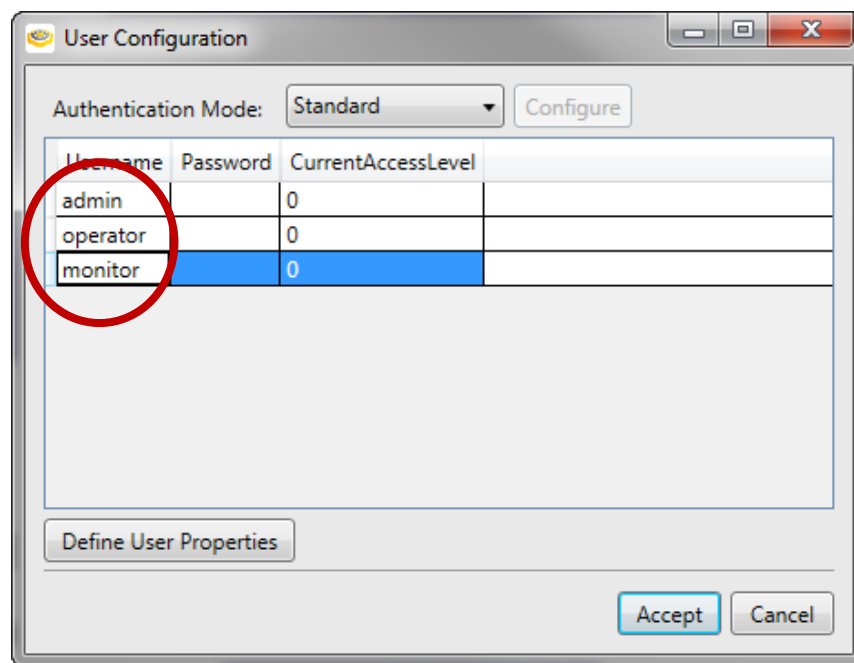
1. Add User Control

a. Add User Account information

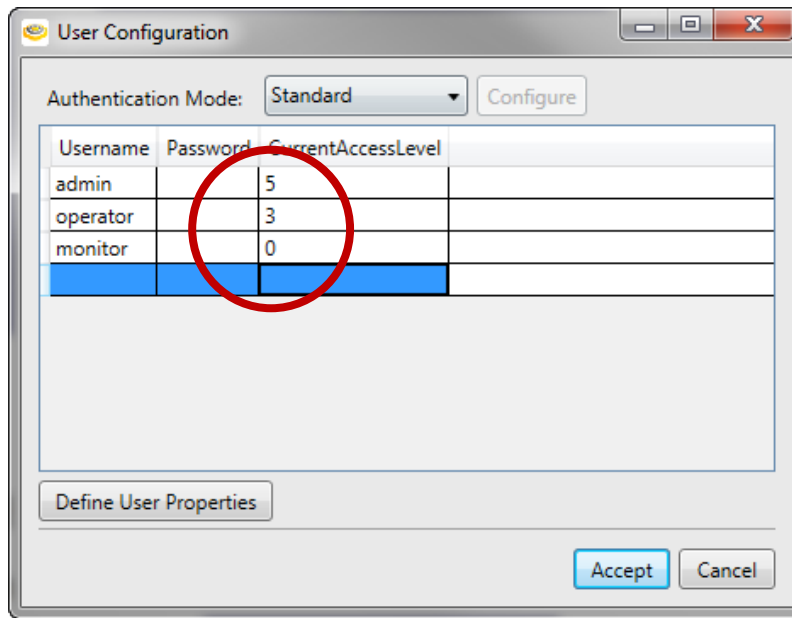
- i. Go to the System area under the Explorer pane and double-click on Users.



- ii. Add some users to the list like “admin”, “operator”, and “monitor”. Give them passwords if you’d like.



iii. Assign them some level of access



iv. Press Accept

b. Add a login page to come up at start-up

i. Add a new page and call it "LoginPage".

LoginPage

MainPage

ii. Add some text, a TextBox, PasswordBox, and a button to the page.

User: miguel

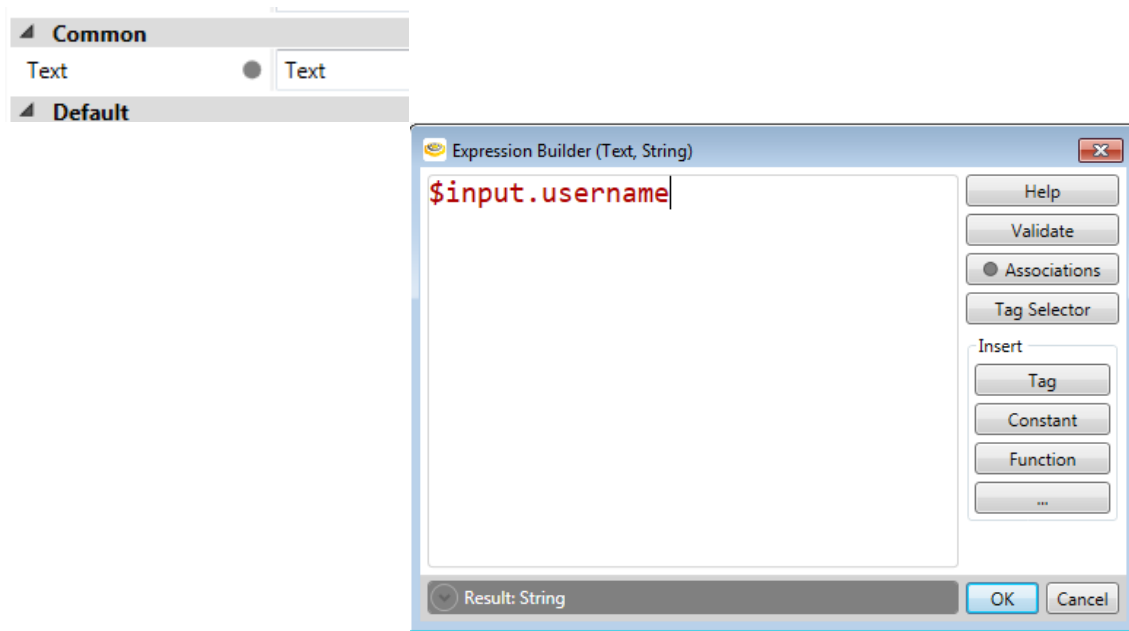
Password: ●●●●●●

Login

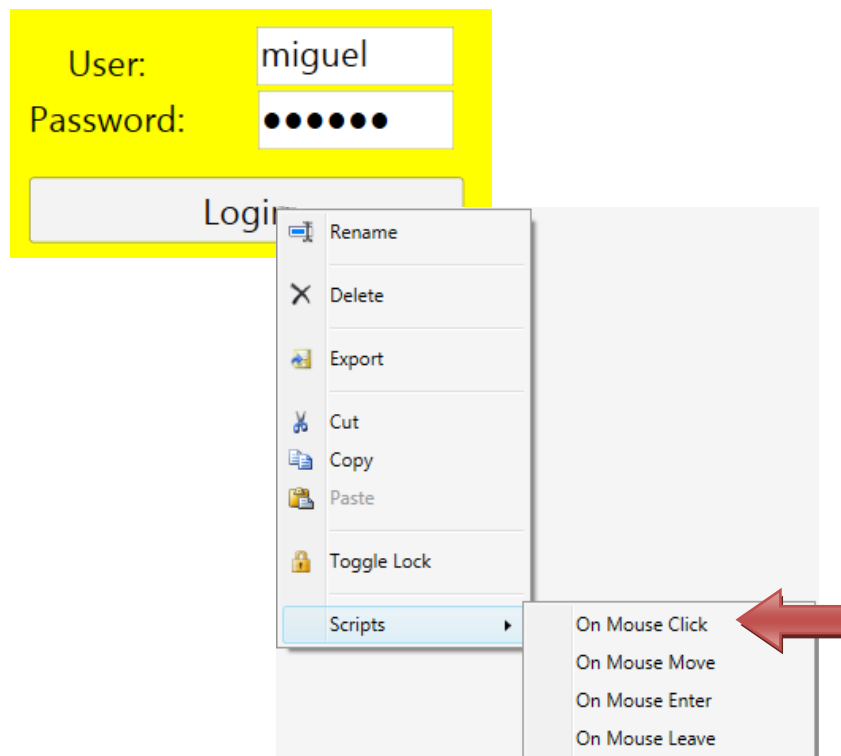
iii. In the Tag Manager, add a tag named "Input.Username" and one called "Input.Password". Make them both be strings.

Input.Username		String	
Input.Password		String	

- iv. Assign \$Input.Username to the Text Property of the TextBox.



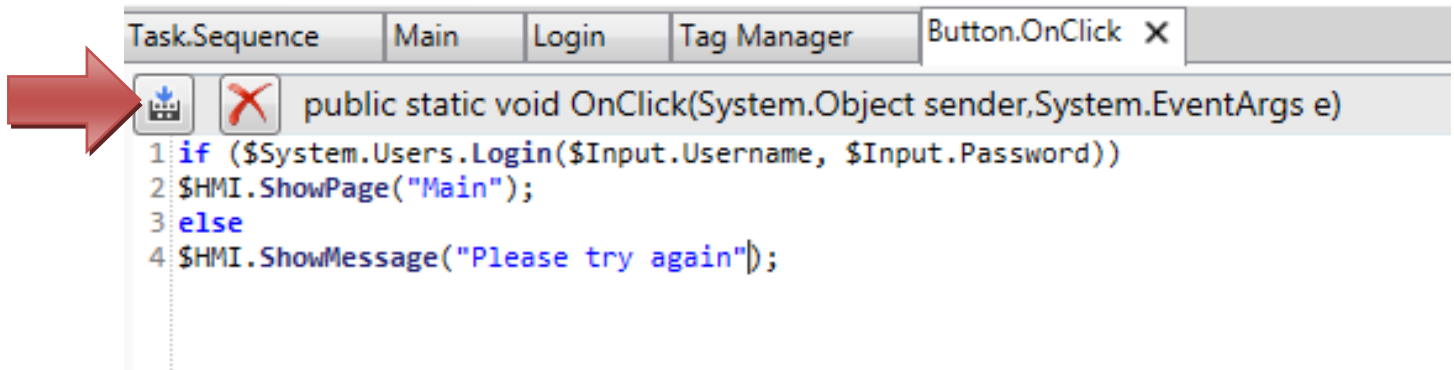
- v. Assign \$Input.Password to the Password Property of the PasswordBox
- vi. Since we want to do more than one command, we need to enter a script for the button. Right-click on the “Login” button and choose “Scripts” and then “On Mouse Click”



vii. Write the following code into the script:

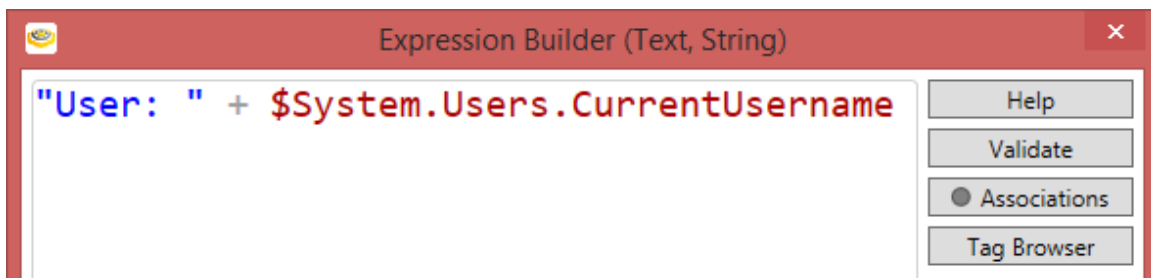
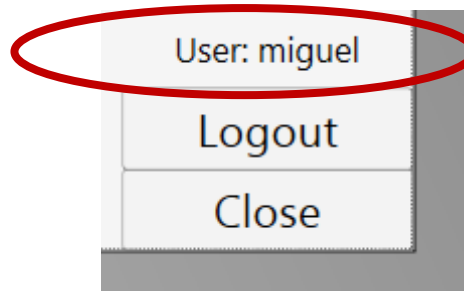
```
if ($System.Users.Login($Input.Username, $Input.Password))  
$HMI.ShowPage("Main");  
else  
$HMI.ShowMessage("Please try again");
```

viii. Compile and make sure everything looks OK.

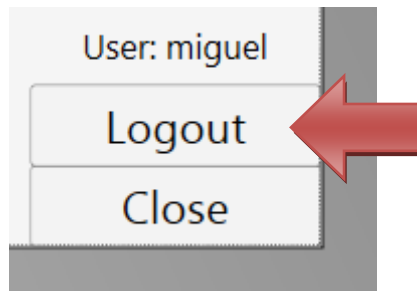


c. Display on main page the current user logged in

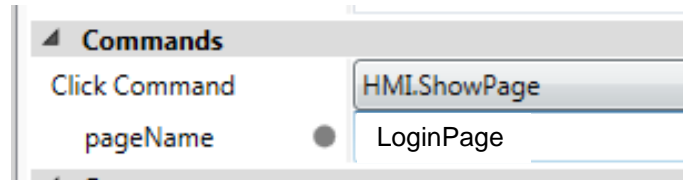
i. On the Main page, add a label to display the current user.



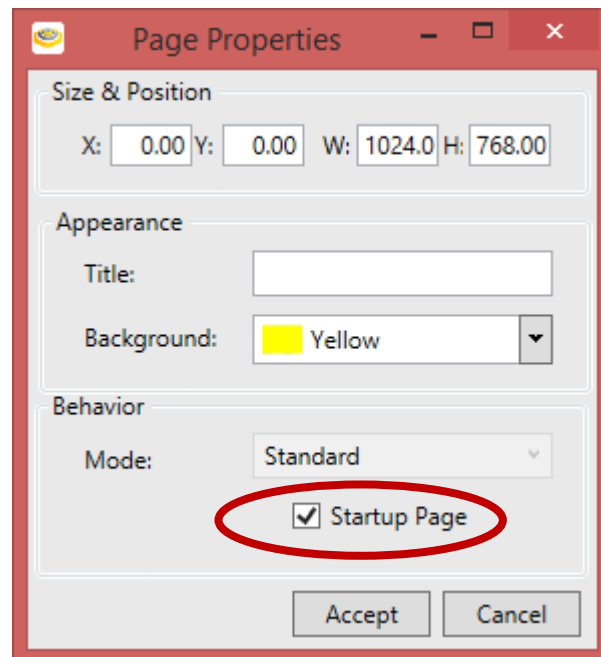
- ii. Also add a button that allows the user to login again



- iii. Use the Click Command Showing the



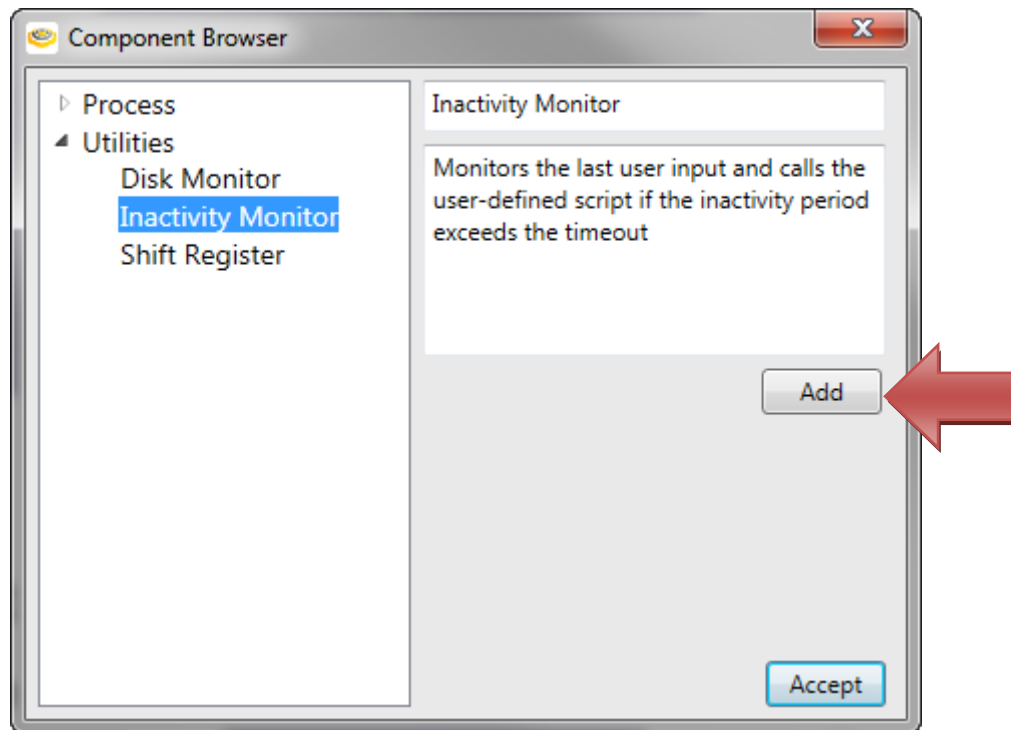
- iv. Set the login to be the start-up page by going to the page Properties (right-click on page name).



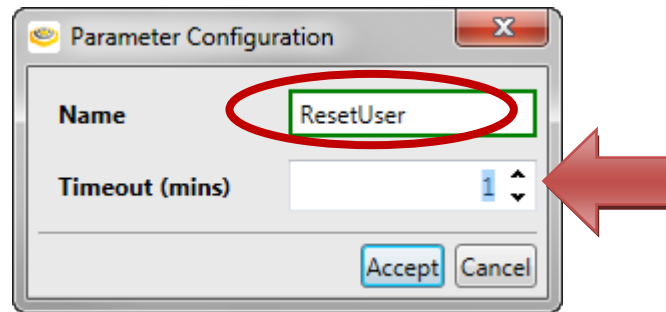
- v. Try it out in Test Mode.



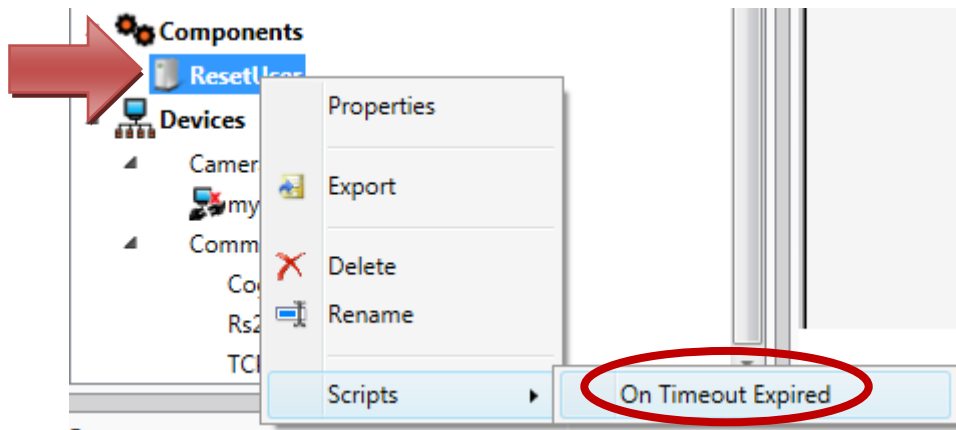
- 2. Reset to default user after 1 minute of inactivity
 - a. Add an Inactivity Monitor
 - i. Right-Click on Component and add InactivityMonitor under Utilities.



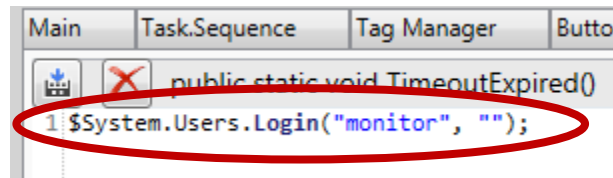
- ii. Name it “ResetUser” and have the Timeout set to 1 minute



- iii. Right-Click on ResetUser and go to the Script -> OnTimeoutExpired

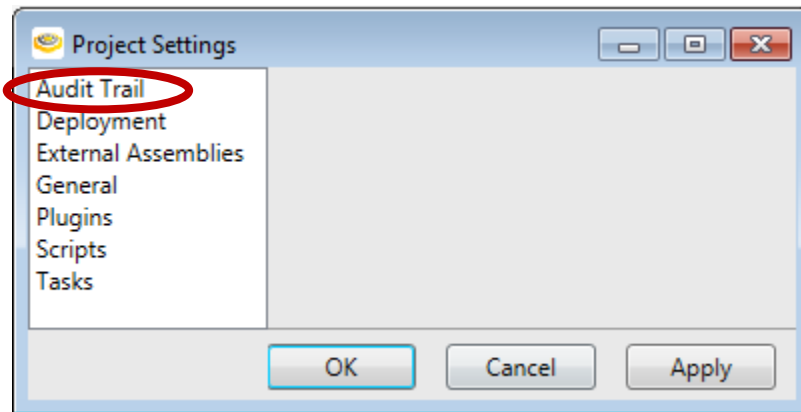


- iv. Add the following line to your script and compile

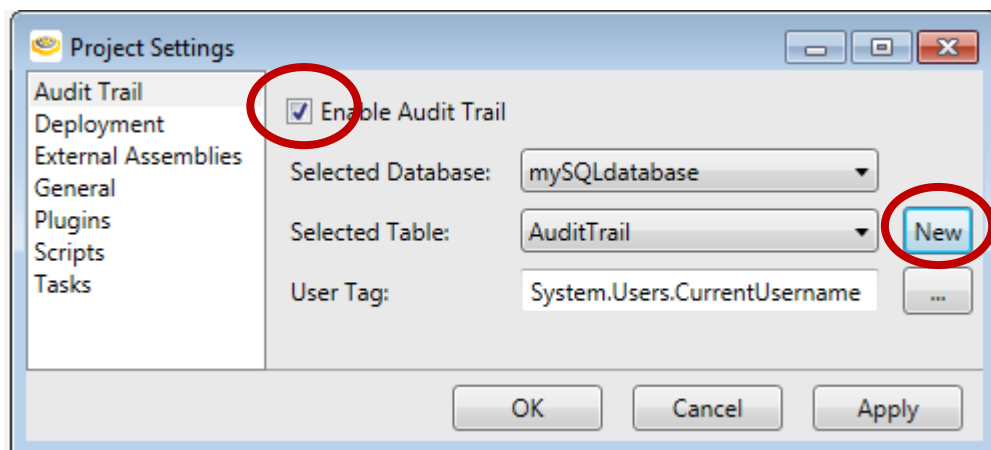


3. Add Audit Trail for changes in User Account

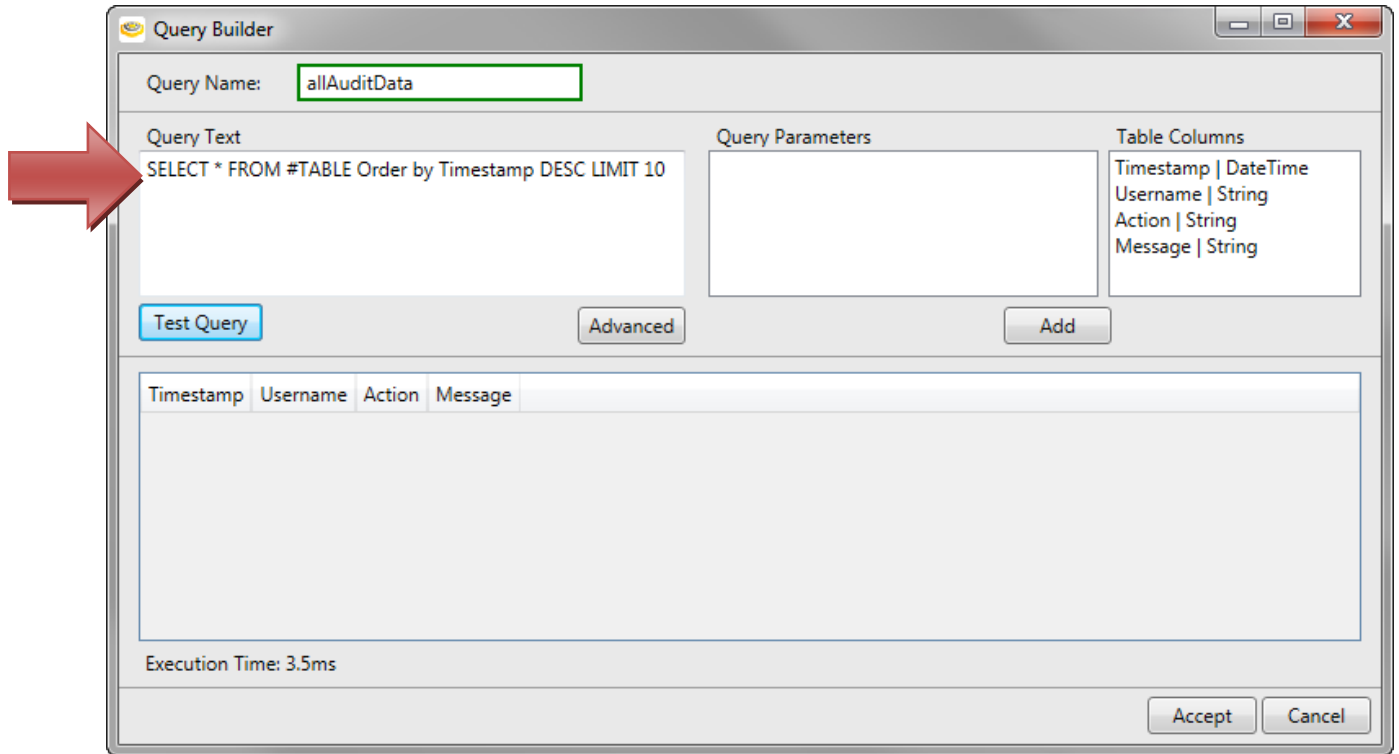
- Go to Settings in the Explorer and choose Audit Trail



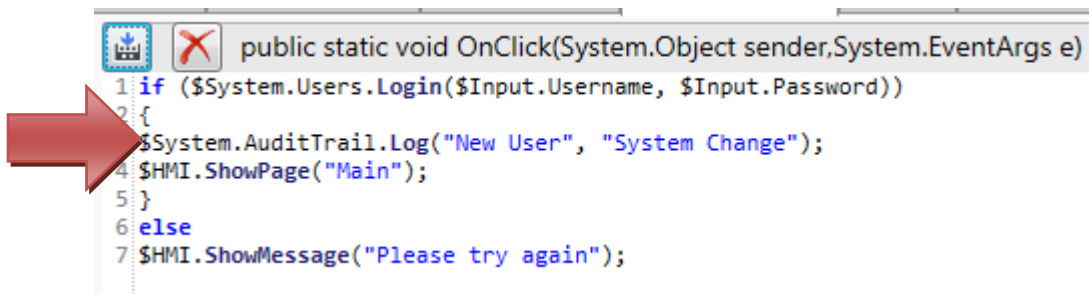
- Enable it and choose “mySQLdatabase” for the Selected Database and select “New” to create “AuditTrail” as the Selected Table.



- Add a query named “allAuditData” to AuditTrail Table that shows all data. Make it limit to 10 and give information from most recent first.



- Go back to the script for the “Login” button on the Login page and add the following to the script – make sure you compile.



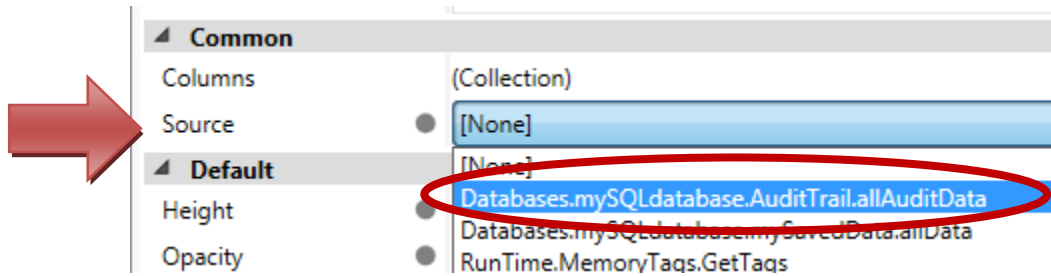
a. Display table on Login Screen

- i. Add a table to the login screen and link it to the AuditTrail query.



The image shows the Cognex Designer login screen. At the top is the Cognex Designer logo. Below it, the text "User logged" is displayed. There are two input fields: "User:" with the value "miguel" and "Password:" with masked characters (dots). A "Login" button is positioned below the password field. At the bottom of the screen, there is a table displaying login history.

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2/19/2015 3:10:02 PM	miguel	Logging In	Successful
2/19/2015 3:50:49 PM	miguel	Logging In	Successful
2/19/2015 3:57:01 PM	miguel	Logging In	Successful
2/19/2015 4:00:03 PM	miguel	Logging In	Successful



- ii. Go into Test Mode and try out the changes



User logged

User:

Password:

Timestamp	Username	Action	Message
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Challenge: Add Audit Table to a separate page that pops up from a button on the login page. Only certain levels can see the Audit Table.