

Day 5 lab work

This is the Core Class lab work for day 5. To earn certification from this class, you must complete this lab work during the designated time in class.

Instructions

Using the same project we have been working on throughout the class today, complete the following steps.

Add a report

1. Create a new report.
2. Name the report **Lab work day 5**.

Add data

1. Create a data source for the report using the **Tag Historian Query**.
2. Add the **Amps**, **HOA**, **Speed**, **SpeedSP**, and **Totalizer** tags from **Conveyor 1**.
3. Name the query **Conveyor**.
4. Set the **Sample Size** to **Fixed, 100**.

Design the report

1. Add a **Text** shape to the top of the report page.
2. Edit the text to read, **Lab work report**.
3. Add another **Text** shape below the first one.
4. Edit the text to display the **start** and **end dates**.
5. Set the **Date Format** property to display both the date and time.

Add a Table

6. Add a **Table** to the report that covers the top half of the page.
7. Set the table's **Data Key** to the **Conveyor** query.
8. Set the table's **Details** row to show 6 columns.
9. Add all **six** of the **query's** columns to the **Details** row's cells.
10. Add a **Header** row.
11. Modify the **Header** row to display headers for each column.
12. Set the **widths** of the **Header's** cells to match the **widths** of the **Details'** cells.

Add a Timeseries Chart

1. Add a **Timeseries** chart to the bottom half of the page.
2. Set the chart's **Data Key** to the **Conveyor** query.
3. Add the **Speed** and **SpeedSP** tags to the chart.

Create a Vision window

1. Create a new **Vision** window named **Lab work day 5**. Alternatively, you can duplicate and rename the **Empty** window.
2. Add a **Label** to the window. If you duplicated the Empty window in step 1, **change the text** on the header instead.
3. Set the **Text** property of the window to **Lab work day 5**.
4. Add a **Report Viewer** component.
5. Set the **Report Path** to the **Lab work day 5** report.
6. Add a **Date Range** component.
7. Bind the **Report Viewer Start Date** parameter to the matching parameter on the **Date Range**.
8. Bind the **Report Viewer End Date** parameter to the matching parameter on the **Date Range**.

Set navigation

1. Add the **Lab work day 5** main window to your **Navigation Tab Strip**.

Test your work

1. Open the **Lab work day 5** window in the Vision Client.
2. Verify that the **Report** displays correctly.
3. Verify that changing the date on the **Date Range** slider changes the data being shown on the report.

Lab work check

Once you have completed all of the steps above, please let your instructor know so that they can check your work. Please do the following:

1. Have your Designer open to the Report Data screen. The instructor will:
 - a. Verify that your data is set up properly
2. Then go to the Report Design screen. The instructor will:
 - a. Verify that your table and chart are set up properly.

Additional challenges

If you finish the lab work early, give these challenges a try.

Completing these challenges is not required for certification. Your instructor will not cover these in the lab work review.

1. Add a **Dropdown List** to the **Vision Window** displaying the report.
2. Populate the **Dropdown List** with the **Conveyors**.
3. Add a binding so that an operator can select a Conveyor from the list and display that Conveyor's information on the Report. You will also need to modify the Report's data source.

Virtual classes only

This is the last day of class. After checking your work, the instructor will cover the lab work before the end of the day. If you are taking the class virtually, please wait until after the day's lecture to shut down the machine.