CYBR 3520 "Introduction to Cyber-Physical Systems Security"

HW#3

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***OpenPLC***

[Objective]

* Learn how to use OpenPLC Editor to create a program using Ladder Logic.

1. Use OpenPLC Editor to create the First Project Ladder Logic as described at the URL:

<https://openplcproject.com/docs/3-2-creating-your-first-project-on-openplc-editor/>

Use your name for the project and complete the instructions at the above URL. Submit a screenshot of your Ladder Logic program. You need to capture the full screen of OpenPLC.

2. Based on the created project in 1, force each input PB1 and PB2 through all possible combinations of input states and complete the table as shown below:

|  |  |  |
| --- | --- | --- |
| PB1 State | PB2 State | LED status |
| Unpressed | Unpressed | **Off** |
| Pressed | Unpressed | **On** |
| Unpressed | Pressed | **Off** |
| Pressed | Pressed | **Off** |

Submit screenshots of Ladder Logic program simulation including forcing of PB1 and PB2 to have all possible combinations of states and the completed table.

Diagram, schematic

Description automatically generated

Diagram, schematic

Description automatically generated

Diagram

Description automatically generated

A screenshot of a computer

Description automatically generated with low confidence

Diagram, schematic

Description automatically generated