

Projects 2 and 10

GOAL:

Create the first screen of our HMI. This will be the opening / welcome screen that loads first when the HMI is started. It should provide HIGH-LEVEL system control and visibility based on the tags listed below.

SUMMARY:

Now we're going to start working with the main technologies for this course – Wonderware (aka Indusoft, aka Schneider Electric) Web Studio and Maple Systems EZWare / EasyBuilder.

We're double-fortunate that Wonderware is not only one of the most popular visualization technologies in the world today, but there is also a student license available that allows us to work hands on with the product to really MASTER it before going out into the working world. And what's awesome: by the end of this course you'll have a full-featured, rather comprehensive HMI completely built by you and entirely unique that you'll be able to show off to perspective employers. That being the case, you might want to put your BEST foot forward from here out. ;-)

When our HMI app first starts, what SHOULD the Operator be looking at? Well, there are no right / wrong answers here, but keep your UX in mind. That should ALWAYS be a HUGE consideration when designing an HMI! The three things that come to my mind are:

- 1) My Operator wants to see (generally) what the system is doing.
- 2) My Operator wants to control (generally) what the system is doing.
- 3) At MOST, my Operator should be a single click away from anything he may want.

One more thing to make it interesting: let's add two animated illustrations to this screen one showing the filter / differential pressure and direction of flow, and the other showing the tank / level.

TAG USAGE:

B3:4/6	BACKWASH_RUNNING	Backwash Running
F8:3	DIFF_PRES	Differential Pressure
F8:2	LT1_SV	Level Transmitter LT-1 (0-100 %) Scaled Value
B3:0/7	P1	Pump P-1 Bit
F8:0	PT1_SV	Pressure Transmitter PT-1 (0-20 psi) Scaled Value
F8:1	PT2_SV	Pressure Transmitter PT-2 (0-20 psi) Scaled Value
B3:3/8	SYS_RUNNING	System Running