Basic Robot Main.vi
D:\Documents\LabVIEW Data\3-19-09\Basic Robot Main.vi
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Put your teleop code here.
By default this reads the X and Y axis of joystick 1
and drives using arcade style to control two jaguars on
PWM channels 1 and 2.
It also feeds the watchdog to keep the robot I/O enabled.
When debugging, a breakpoint will cause the motors will stop.
If you disable the watchdog, the motors will continue running
at a breakpoint. Be sure to have it on blocks if disabled.

Start Robot Communication.
Runs in parallel with user code.

This is the VI that will be launched and run while in autonomous.
Autonomous Independent.vi

Update Motors and I/O based upon communications.

Waits until new data is received

Update the dashboard.
By default only first analog, first digital, and solenoid are published

"TeleOp Execute"

Init Robot Drive and share for use in Autonomous

This loop processes the Tele-Op messages from the driver station.

TeleOp Execute is where normal drive code will be placed. TeleOp Reset may be useful for setting I/O to known values.

To write code for autonomous mode, open Autonomous Independent.vi. It will

Start user watchdog and share for use in Autonomous

PS traction control feed

SB traction control feed

Process camera images.

Enable image processing

This loop runs in parallel. It gets images and processes them for controlling motors, etc.

An example of processing an image is to FindColor and use that to steer the robot.

If you don't wish to process images all the time, update the Enable to be based on Competition Mode, etc.

To send data to other loops, you may want to use global or local variables.

Primary Image

SB traction control

SB gearbox enc

SB follower wheel enc

SB gearbox distance
SB gearbox rate
SB gearbox stopped
SB follower wheel distance
SB follower wheel rate
SB follower wheel stopped

SB slip ratio
SB slip ratio
SB PID output
SB PID output
slip ratio to high?
SB slip ratio margin
SB TC gains
SB traction enabled?

PS traction control

PS gearbox enc

PS follower wheel enc

PS gearbox distance
PS gearbox rate
PS gearbox stopped
PS follower wheel distance
PS follower wheel rate
PS follower wheel stopped

PS slip ratio
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slip ratio to high?
PS slip ratio margin
PS TC gains
PS traction enabled?