Real Time Or Autonomous Mode Selection

Real Time Mode

System awaits next command

User Input
To User Created Program

User Input Converted to Control System Input VIA Java Library

Java Translated Inputs converted to Serial Bit Stream and sent to wireless transmitter

Serial Bit Steam is transmitted wirelessly to Receiver on Platform

Control System receives Bitstream and sends PWM to motor

Freq feedback from motor is compared to commanded speed (Freq Proportional to Speed)

Result of Feedback comparison is used to adjust PWM for Motor 1 & 2

System awaits next command

User Input to User Created Program (last command is followed by end command)

Autonomous Mode

User Input Converted to Control System Input VIA Java Library

Java Translated Inputs converted to Serial Bit Stream to completed signal

Completed command signal is sent to user created program

Serial Bit Steam is transmitted wirelessly to Users Serial Receiver

Control System receives Bitstream until End command is received

If End Command Continue, else wait till end command

Serial Bit Steam is transmitted wirelessly to Receiver on Platform

Control System Stores Bitstream

Serial Bit Steam is transmitted wirelessly to Users Serial Receiver

Completed command signal is sent to user created program

Result of Feedback comparison is used to adjust PWM for Motor 1 & 2

System awaits next command

Command has been completed and serial Signal is sent to wireless transmitter

Command has been completed and serial Signal is sent to wireless transmitter

User Input to User Created Program

User Input converted to Control System Input VIA Java Library

Java Translated Inputs converted to Serial Bit Stream and sent to wireless transmitter

Serial Bit Steam is transmitted wirelessly to Receiver on Platform

System awaits next command

Completed command signal is sent to user created program

Command has been completed and serial Signal is sent to wireless transmitter

Completed command signal is sent to user created program

User Input converted to Control System Input VIA Java Library

Java Translated Inputs converted to Serial Bit Stream to completed signal

Serial Bit Steam is transmitted wirelessly to Users Serial Receiver

Control System receives Bitstream until End command is received

If End Command Continue, else wait till end command

Serial Bit Steam is transmitted wirelessly to Receiver on Platform

Control System Stores Bitstream

Serial Bit Steam is transmitted wirelessly to Users Serial Receiver

Completed command signal is sent to user created program

Result of Feedback comparison is used to adjust PWM for Motor 1 & 2

System awaits next command

Command has been completed and serial Signal is sent to wireless transmitter

Command has been completed and serial Signal is sent to wireless transmitter

User Input to User Created Program (last command is followed by end command)

Autonomous Mode

User Input Converted to Control System Input VIA Java Library

Java Translated Inputs converted to Serial Bit Stream and sent to wireless transmitter

Serial Bit Steam is transmitted wirelessly to Receiver on Platform

Control System receives Bitstream until End command is received

If End Command Continue, else wait till end command

Serial Bit Steam is transmitted wirelessly to Receiver on Platform

Control System Stores Bitstream

Serial Bit Steam is transmitted wirelessly to Users Serial Receiver

Completed command signal is sent to user created program

Result of Feedback comparison is used to adjust PWM for Motor 1 & 2

System awaits next command

Command has been completed and serial Signal is sent to wireless transmitter

Command has been completed and serial Signal is sent to wireless transmitter

User Input to User Created Program (last command is followed by end command)