Real time Embedded programing

Raspberry pi Assignment.

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# Introduction:

## Project Aim:

We where tasked with producing an real time system which integrated an analogue sensor with the Raspberry Pi “embedded computer system” this system should take readings from the analogue sensor which will be fed to the Raspberry Pi though an External analogue to digital converter board and then displayed on an graphical user interface which can be interfaced with by the user.

## Project Specification:

* The system must be a real time system and thus must respond in a timely manor.
* The system must take measurements using an analogue sensor.
* The system must interface the analogue sensor with a Raspberry Pi using an analogue to digital converter.
* The system must display the measurements in real time on a graphical user interface.
* The software must allow user interaction.
* The system must be able to operate standalone.
* The system must allow user interaction on the graphical user interface through the use of the mouse.

# Background:

## Real time systems:

## Raspberry Pi:

## Sigma Delta analogue to digital converter:

## Accelerometers:

# Hardware:

# Software:

# Testing:

# Uses for this system:

# Further work:

# Conclusion: