

Basic Program Hierarchy

User level

Graphical User
Interface

Software Level

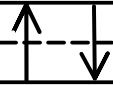
Main Program

Hardware Level

LabJack ADC

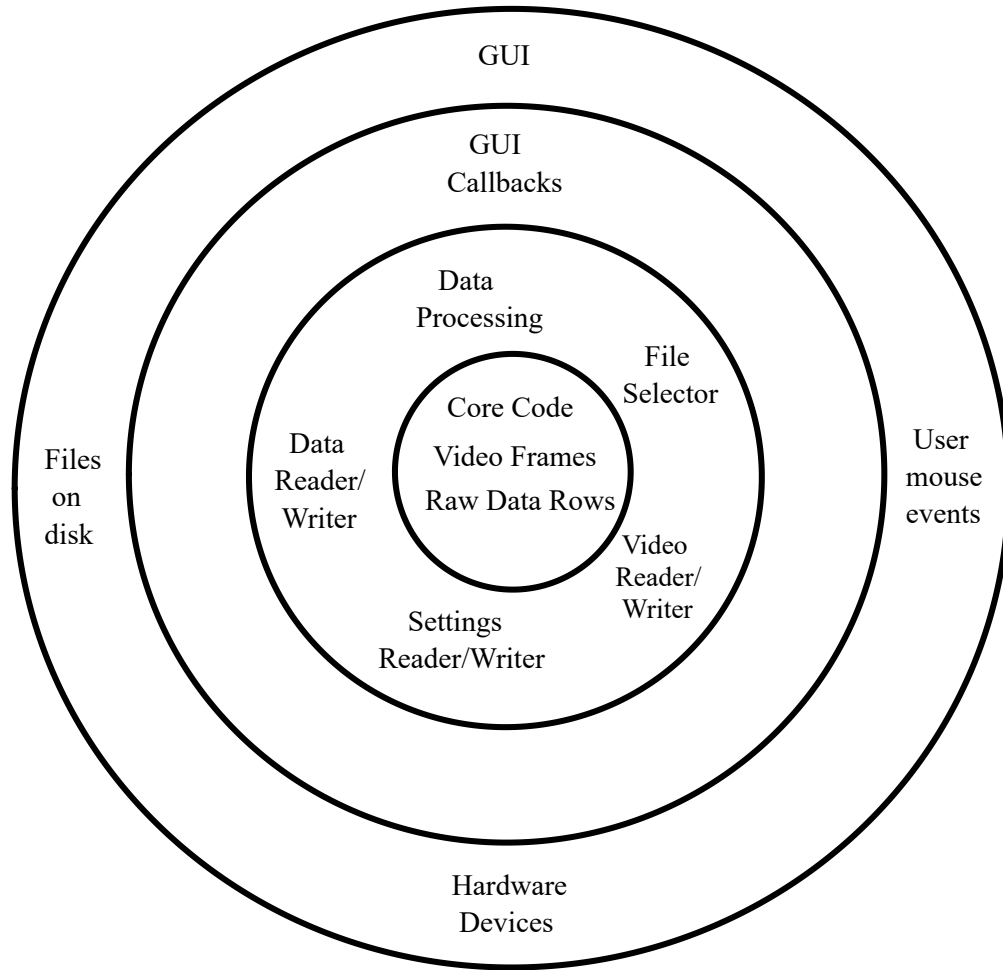
PCB Camera

Physical
Sensors (6x)

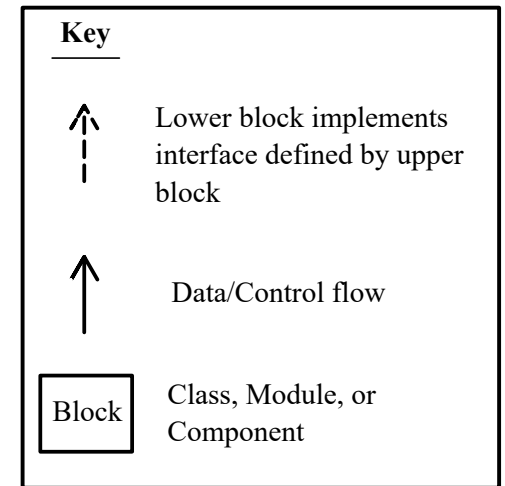
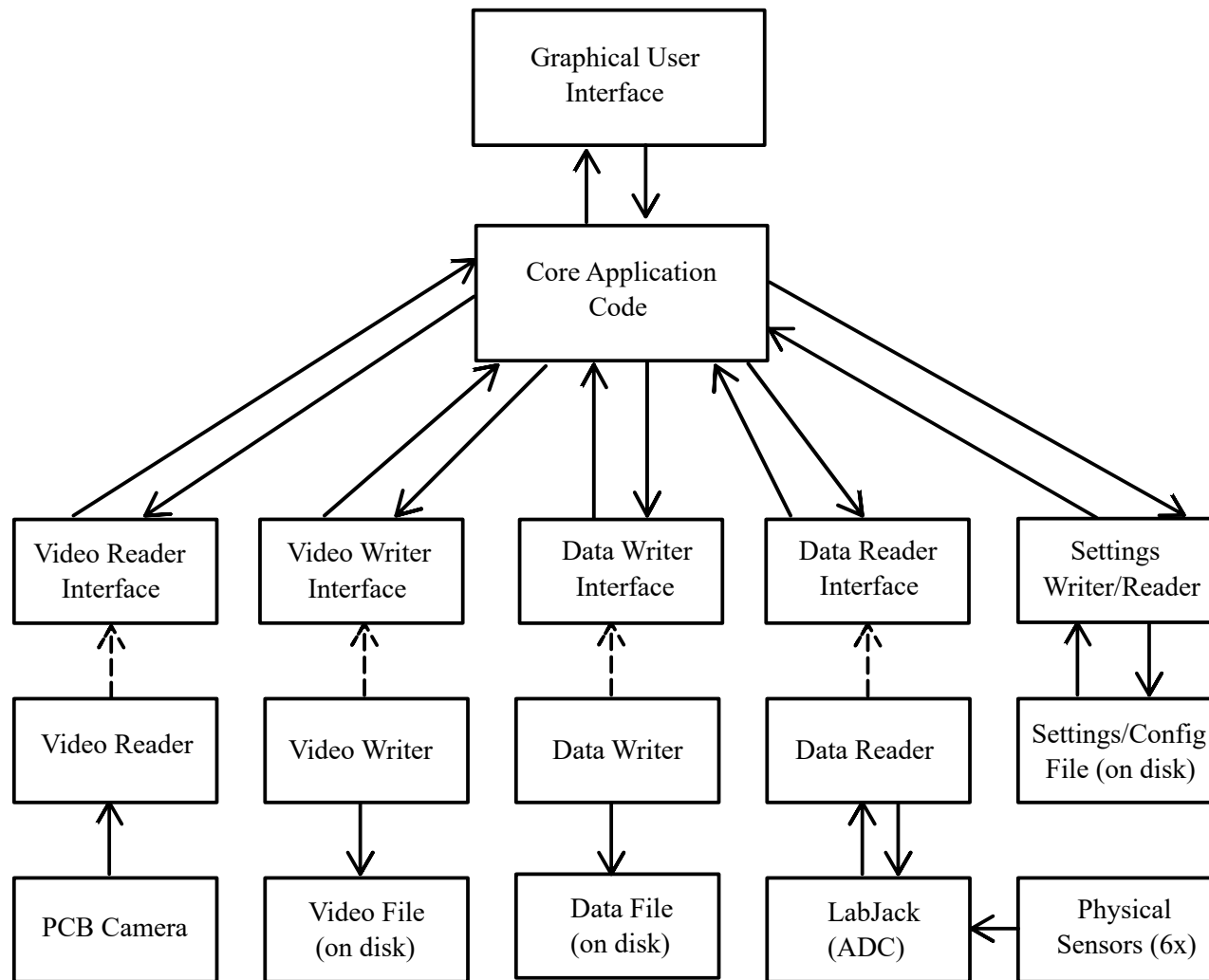


Software Boundaries

(Clean Code Architecture)



Software Abstraction Hierarchy

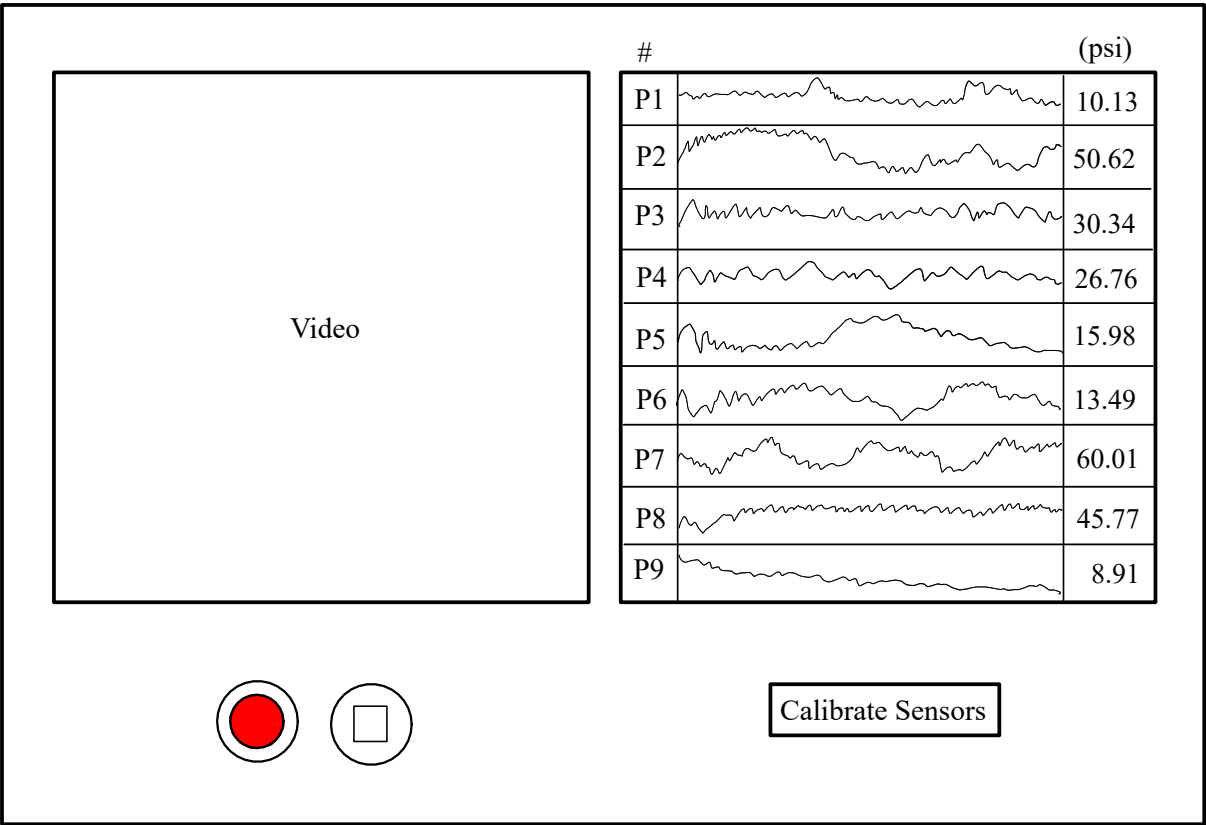


UI/UX Diagrams:

Welcome Window



Live Session Window



Popup: File Selection Dialog

Select a File

C:\User\Documents\Super Sonic Nozzle Experiment\Sessions

Search:

My File 1	.txt	2 mB	2022/02/20 5:06
My Longer File	.txt	6 mB	2022/02/18 12:03
My Other File	.txt	10 mB	2021/02/20 5:28
My Cool File	.txt	3 mB	2022/01/15 8:42
My Data File	.data	2 mB	2019/02/20 5:06
My Easter Egg	.txt	1 mB	2022/02/16 10:34
My Experiment	.data	6 mB	2022/02/18 12:03
My Notes	.txt	1 mB	2022/02/16 10:34
My Video 1	.mov	10 mB	2021/02/20 5:28
My Other Video	.mp4	3 mB	2022/01/15 8:42

File Name:

Save

Open

Screen Progression Flow Diagram

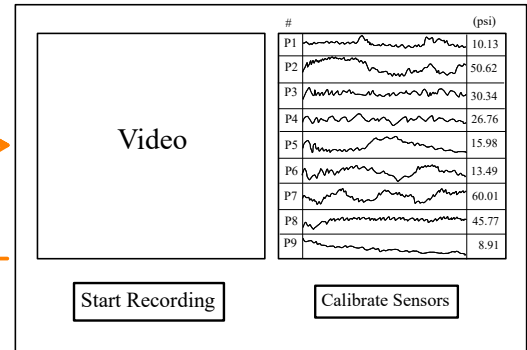
On Open

Welcome Window



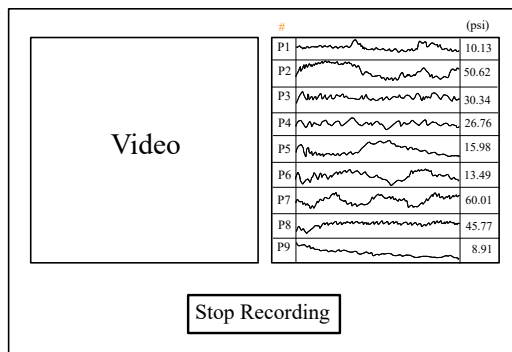
On New Session

Live Session Window



On Home

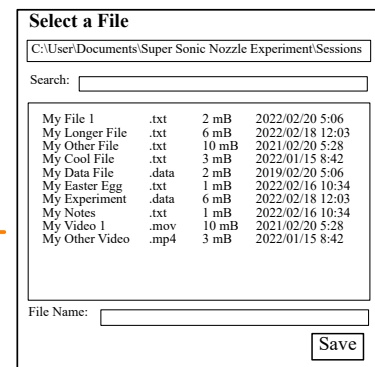
Live Session Window



On Stop Recording

On Start Recording

Popup: File Selection Dialog



On Save