

Criterion B: Record of tasks

Tas k #	Planned action	Details	Time estimated	Target Completion date (m/d/yy)	Criterion
1	Find a client for IA	Contact client for first meeting	2 weeks	12/01/21 - 01/05/22	Plan
2	First meeting with client: have a defined problem	Have a clearly defined part in the client's project.	1 day	03/10/22	Plan + starting to design
3	Meet with teacher to discuss the project and possible solution	Get approval for the complexity and nature of problem and solution Teacher approved of the project, yet some suggestions made the project more detailed.	1 day	03/15/22	Plan + design
4	Second meeting with client: Agree on my designed proposed solution with my client and communicate the success criteria	Get approval of success criteria and start working on the solution. The base of the software design is approved by client	2 weeks	03/10/22 - 03/20/22	Plan+ design
5	Design mechanism to actuate the cap and begin to program the actuation.	<u>Plan</u> : Work with a solenoid valve to push on the cap <u>Outcome</u> : tested solenoid valve but was too weak --> designed an actuation with a servo motor (had to change crit. A). Ordered Servo motors and worked.	1 week	03/21/22 - 04/20/22	Plan, design, and develop and test the push mechanism
6	Begin programming the sensors. (My client ordered the sensors)	Complete the Arduino program with the sensors and actuation. During this period, I kept close contact with my client by text messages. This is because my client's demands kept on changing as he set up his experiment. Thus, I needed to change the code and criterion A multiple times.	3 weeks	03/21/22 - 04/20/22	Plan, design, and develop the program for sensors.
7	Third (official) meeting with client: met him at his lab.	Test the Arduino part in the setup of my client. Have positive results that satisfy clients. Moving on to programming the Java application	1 day	04/29/22	Test, implement

8	Begin programming Java algorithm that reads from Arduino COM port	Be able to store the data collected by the sensor into arrays on a Java application	1 month	04/20/22 - 06/01/22	Design + develop
9	Design the database	Have a working design for the embedded database, including a database dictionary.	1 week	05/10/22	Design + develop
10	Design the interface of application	Produce the design for the GUI and the class architecture of the application. Document myself in Criteria B	1 week	05/20/22	Design
11	Finish Documentation B: Design		1 week	07/06/22	Design
12	Develop the main window and gather data (2.1 + 2.2 in Design)	Programming the Java application to gather data from the com port and sending it to the database to create jTable.	2 weeks	09/01/22	Design, Develop
13	Develop the Load Table Menu + Save Table (2.2 in Design)	Programming the Table Menu and the Save Table menu to access data taken in the database.	2 weeks	09/10/22	Design, Develop
14	Period of testing	Having finished the core of the program, I need to test multiple scenarios to find bugs in the application. Thus, making corrections as needed, and documenting myself in criteria C	1 week	09/18/22	Develop, Test
15	Finishing documentation C		1 week	09/24/22	Develop
16	Final Testing	Final test period to finalise the application, adjusting bugs or such as needed.	2 days	09/30/22	Develop, Test
17	Application handed to client	Explanation of how the app works through a meeting at my client's lab, doing a couple of tests and answering my client's questions. Implementing the system for his experiments.	1 day	10/02/22	Test, implement
18	Fourth official meeting with client: success criteria and	I will go through the success criteria with my client and see if the application has met the client's needs and requirements.	1 day	10/15/22	Implement

	recommendations for improvement (feedback)				
19	Outline and plan the video	Creating a small outline of the video to prepare how I will show the success criteria	1 day	26/02/23	Test
20	Film + edit the video for Crit. D	Go to my client's lab to film the video and edit the video to match up the required time	3 days	27/02/23	Test
21	Finishing to write Criteria E	After having evaluated my application and having my recommendations for improvement, I complete documentation E.	1 week	01/03/23	Implement