Individual Weekly Report

Name: Abdiel Rivera

Team: Bray IIOT Smart Solutions

Date: 2/24/2025

Current Status

1. What did you **personally** work on this past week?

Task	Status	Time Spent
Related Work	completed	2 hrs

Include screenshots/graphics to illustrate what you did this past week:

Smart valve IIOT systems can be found across multiple industries. From water to waste management to oil and gas, systems similar to the one we are working on can be found everywhere. Though they are similar, many of these systems have specifications that make them best suited for the specific task they are being used for. Additionally, not all systems include an accompanying web application for further monitoring of the valve system. With such widespread usage of these systems, determining the novelty of our project comes down to how we can modify an existing system to make it so that it becomes more effective at doing what it was designed to do.

Looking at similar systems, we learn a decent amount about how to approach our project. Ever since the uptick in popularity of IoT systems, there have been countless innovations that have furthered their ability to optimize various systems. According to Allahloh & Mohammad (2018), "The impacting of these technologies in industry become more and more intense, with related innovations including industrial wireless, new communications protocols, sensors, actuators, high-performance

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microprocessors and cloud computing." For our project, we will be using many of these technologies to integrate a carbon dioxide detector into an existing smart valve system and have it transmit data

- 2. What problems did you run into? What is your plan for them?
- Our biggest problem right now is how slowly Bray is moving with regards to our NDAs, we are falling increasingly behind schedule because we are unable to access key components of our project. Our only option is to keep contacting them in the hopes that they do something soon.
- What is the current overall project status from your perspective?
 Our project is only just getting started and I am starting to get worried about our ability to finish everything on time.
- 4. How is your team functioning from your perspective?

 Our team is working great together, so far we have been a well oiled machine.
- 5. What new ideas did you have or skills did you develop this week? I have not developed any new skills since last week
- 6. Who was your most awesome team member this week and why?

 Matthew was the most awesome team member this week because he kept an eye out on in case our Bray sponsors actually showed up for the weekly meeting

Plans for Next Week

What are you going to work on this next week?

I will begin working on the web application for our project to make it accommodate the new sensor.