**Project Development – Weekly Update**

**Smart Household Energy Monitoring and Management**

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Week Number: 5

In Progress

Complete

Delayed

| *Activities carried out this week* | | |
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| **Item** | **Description** | **Status** |
| 1. | **Unexpected Change of plans.**  As I was sending both sets of data to the Esp board, I came across an issue with my original plan which was to use the esp8266. This was not suitable as upon further research there was only one ADC pins (Analogue to digital converter). This meant that the sensor values could not be sent concurrently.  To Fix this problem I changed my board from an esp8266 to an esp32 and an esp32WiFI chip. Doing this allowed me to send data concurrently to the database. |  |
| 2. | **Task #3 -Send Data to firebase using Arduino library.**  Following on from last week, I have now got real-time data being sent to the Firebase Realtime database. This is done via a Firebase library called ESP32 Firebase and the Esp WIFI library. This is all done in the Arduino IDE using C++ code. |  |

| *Plans for the next period* | |
| --- | --- |
| **Item** | **Description** |
| 1. | **#4 Research on how to implement MVVM architecture.**  For the next period, I Plan on researching the best ways to implement MVVM into my project for .NET MAUI. Doing this will make the project better by making it easier to debug and run more efficiently. |
| 2. | **#4 Start the Programming on the navigation system and home screen.**  This week, I will be starting to implement the navigation system for the application side. Once this is completed, I also aim to program the Home screen of application using hardcoded data for now, As I have planned for 2 weeks of implementing the database data. |