

Individual Weekly Report

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Team: Bray IIoT Smart Solution

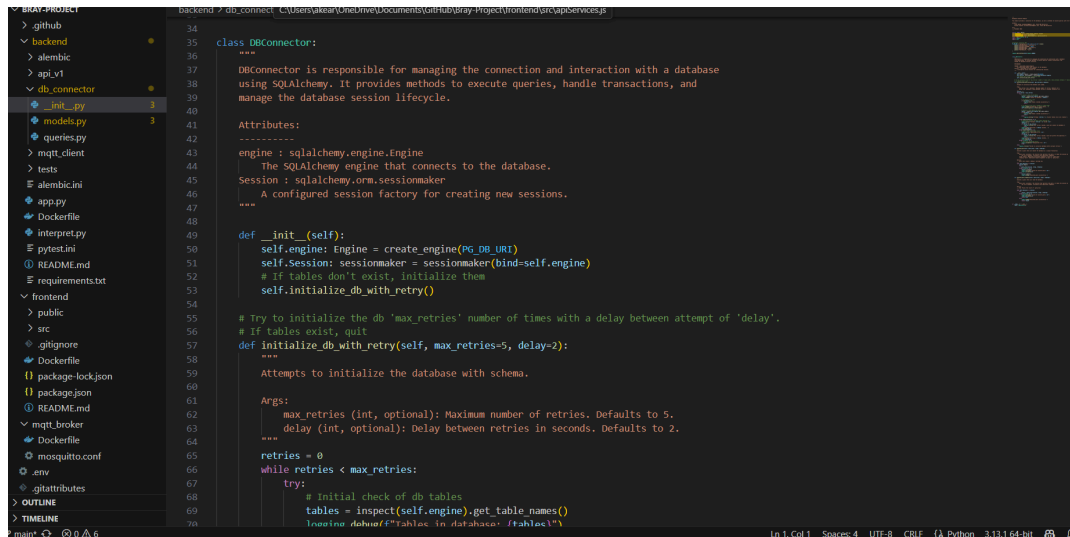
Date: 3/3/2025

Current Status

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

Task	Status	Time Spent
Development of web application	Complete	~2 hour

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



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class DBConnector:
    """
    DBConnector is responsible for managing the connection and interaction with a database
    using SQLAlchemy. It provides methods to execute queries, handle transactions, and
    manage the database session lifecycle.
    """
    Attributes:
    -----
    engine : sqlalchemy.engine.Engine
        The SQLAlchemy engine that connects to the database.
    Session : sqlalchemy.orm.sessionmaker
        A configured session factory for creating new sessions.
    """
    def __init__(self):
        self.engine = create_engine(PG_DB_URI)
        self.Session = sessionmaker(bind=self.engine)
        # If tables don't exist, initialize them
        self.initialize_db_with_retry()

    # Try to initialize the db 'max_retries' number of times with a delay between attempt of 'delay'.
    # If tables exist, quit
    def initialize_db_with_retry(self, max_retries=5, delay=2):
        """
        Attempts to initialize the database with schema.
        """
        Args:
            max_retries (int, optional): Maximum number of retries. Defaults to 5.
            delay (int, optional): Delay between retries in seconds. Defaults to 2.
        """
        retries = 0
        while retries < max_retries:
            try:
                # Initial check of db tables
                tables = inspect(self.engine).get_table_names()
                logging.debug(f"Tables in database: {tables}")
            except:
```

2. What problems did you run into? What is your plan for them?

We discovered that the dashboard wasn't meant to be for production and Bray has their own dashboard for the display of data. Our goal for the dashboard has changed from turning it into something for industry to making the dashboard compatible with more sensors

3. What is the current overall project status from your perspective?

Now that we have all of the firmware we need and had an additional meeting with Bray. The project now has a clearer goal and direction. However, we are still behind.

4. How is your team functioning from your perspective?

The team is working well together. Everyone is communicating and doing their part.

5. What new ideas did you have or skills did you develop this week?

I enhanced my understanding of the project and its legacy components.

6. Who was your most awesome team member this week and why?

Josh for taking the lead on the deliverables this week.

Plans for Next Week

What are you going to work on this next week?

- Backend code configuration
- Backend server configuration (Raspberry Pi)
- Get every hardware component communicating with each other