

**MICHIGAN STATE**  

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**U N I V E R S I T Y**

# Alpha Presentation

## DRIVEN-4 Web Application

### The Capstone Experience

Team DRIVEN-4

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*From Students...  
...to Professionals*

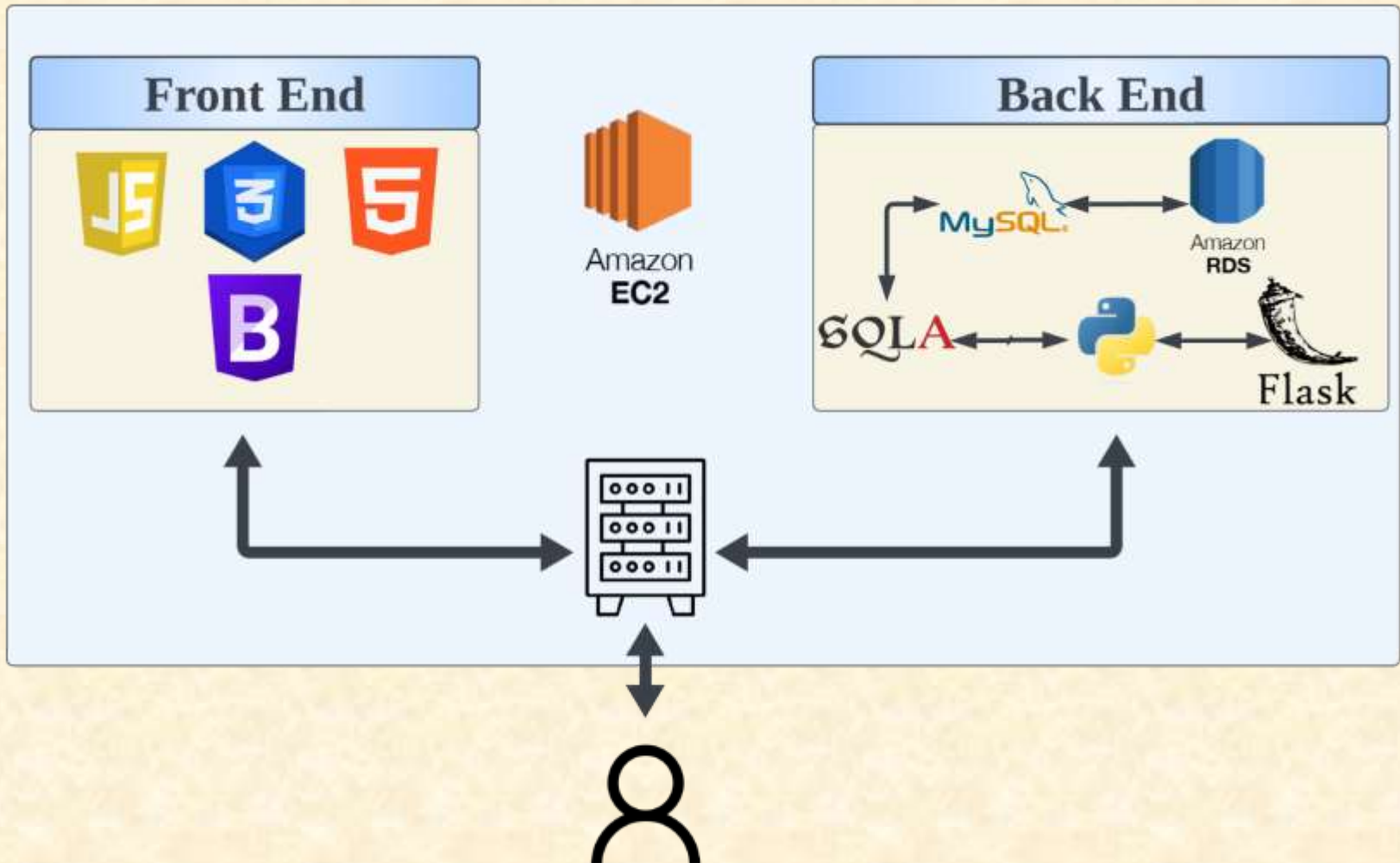
# Project Overview

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- Facilitate connections to DRIVEN-4 Connect modules through custom endpoints
- Enhance data analysis of data collected from modules
- Custom dashboard to view data and control modules



# System Architecture



# Data Modifications Page

Home  
Device Management  
Data Management  
Data Analysis  
User Management  
Account Settings  
Billing

DRIVEN-4

Welcome dongyu  
dongyu@dongyudairy.com (admin)

## Data Modification

### Data Set Modifications

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idEntry	Edit
idModule	Edit
IMEI	Edit
idEndpoints	Edit
time	Edit
dbs	Edit
ModemTemp	Edit

Add Column Remove Column

### Available Data Sets

End Points	\$\$	\$\$\$
endpointString: VARCHAR(255)	idEntry: INT	idEntry: INT
method: VARCHAR(255)	idModule: INT	idModule: INT
time: DATETIME	IMEI: VARCHAR(255)	idEndpoints: INT
	idEndpoints: INT	time: DATETIME
	time: DATETIME	temperature: DEC(10,2)
	dbs: INT	
	ModemTemp: DEC(10,2)	

Logout



# Querying Page

The screenshot shows a web application interface for querying data. The browser address bar displays "127.0.0.1:5000/querying". The application header includes the "DRIVEN-4" logo and a welcome message "Welcome dongyu".

The interface is divided into several sections:

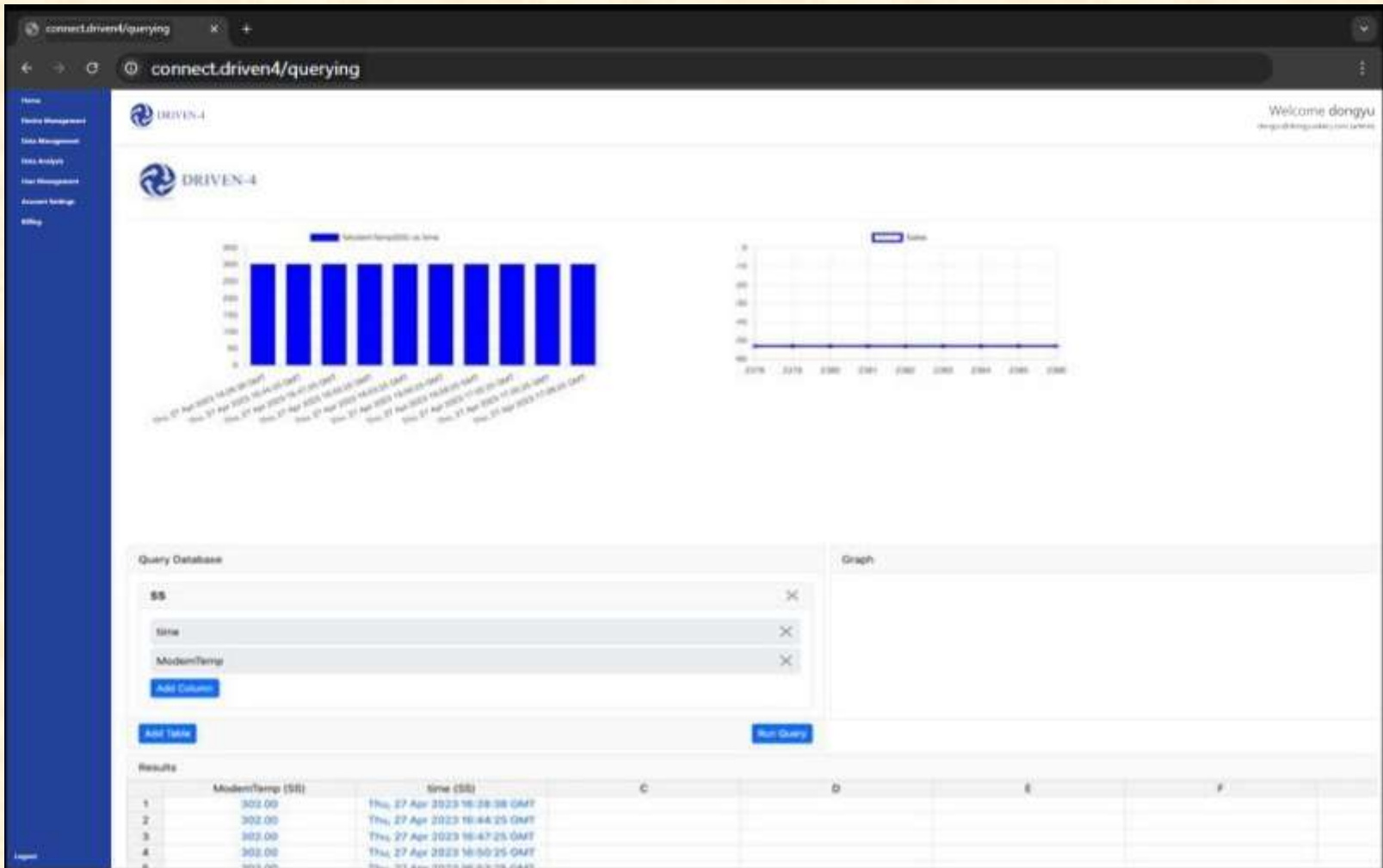
- Query Builder:** A form with fields for "SQL", "URL", "Module", and "Time". There are "Add Row" and "Run Query" buttons.
- Chart:** A bar chart titled "Graph" showing data points for "This graph". The y-axis ranges from 0 to 1,000,000. The x-axis has seven categories.
- Results Table:** A table with columns labeled A through J. The data is as follows:

	A	B	C	D	E	F	G	H	I	J
1	000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
2	0010000000000000	1	700000	000000	000000	000000	000000	000000	000000	000000
3	0010000000000000	2	800000	000000	000000	000000	000000	000000	000000	000000
4	0010000000000000	3	700000	000000	000000	000000	000000	000000	000000	000000
5	0010000000000000	4	800000	000000	000000	000000	000000	000000	000000	000000
6	0010000000000000	5	700000	000000	000000	000000	000000	000000	000000	000000
7	0010000000000000	6	800000	000000	000000	000000	000000	000000	000000	000000
8	0010000000000000	7	700000	000000	000000	000000	000000	000000	000000	000000
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

At the bottom of the results table, there are buttons for "Clear", "Add Row", and "Add Column".



# Custom Dashboard Page



# What's left to do?

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- Merge everything from raw SQL to SQLAlchemy Model
- Finish implementing Custom Dashboard
- Complete Data Modifications page
- Update Data Creation page
- Combine Scripting and Querying pages



# Questions?

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