

MICHIGAN STATE

U N I V E R S I T Y

Alpha Presentation

DRIVEN-4 Connect Update and Upgrade

The Capstone Experience

Team DRIVEN-4

Byerly Andrew

Gidwani Rian

Patel Het

Pieters Flora

Zihao Qian

Department of Computer Science and Engineering

Michigan State University

Fall 2023



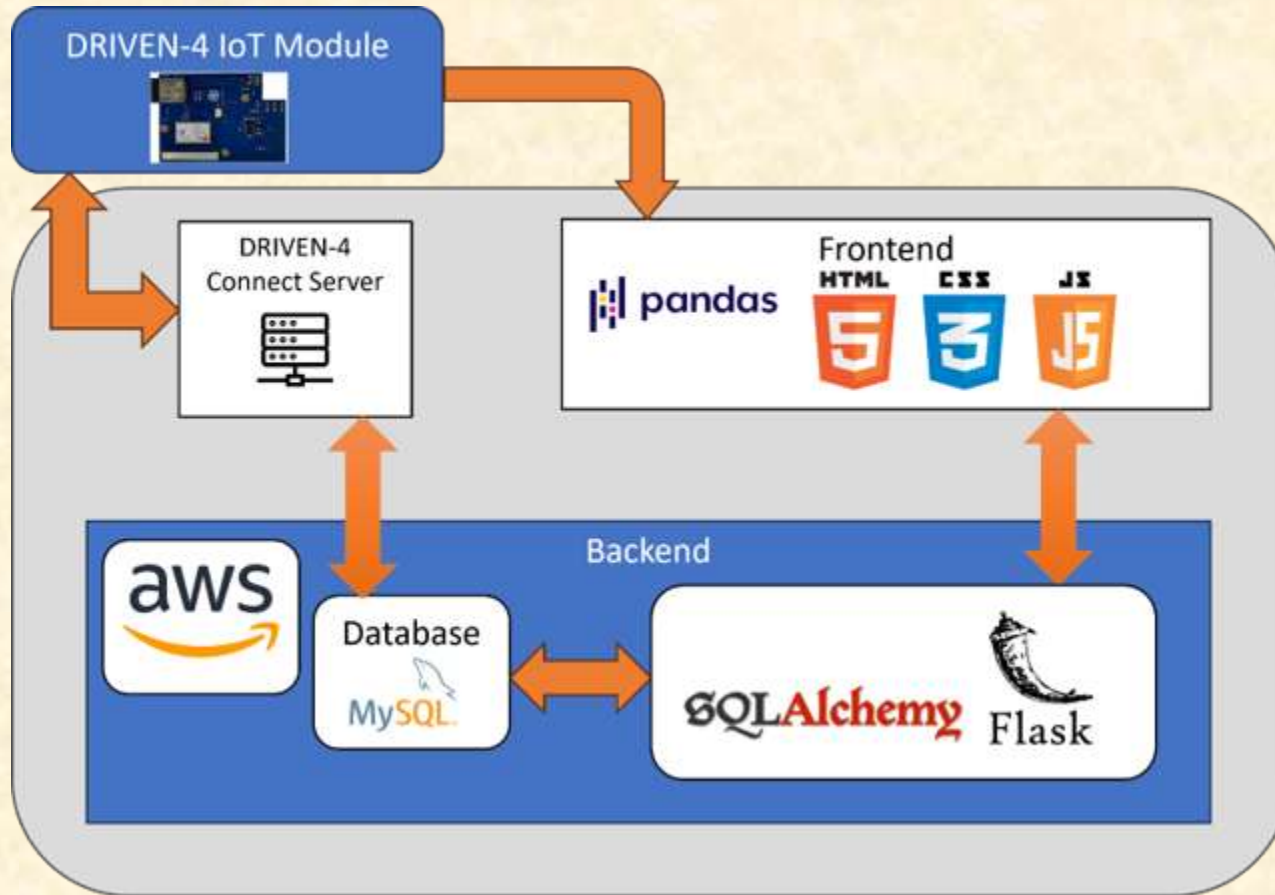
*From Students...
...to Professionals*

Project Overview

- Headquartered in Saint Joseph, Michigan
- Expertise includes PLM, IoT, and cybersecurity
- To develop an easy-to-use web application to talk to the database of their users, firmwares, and modules with the ability to perform data analysis on their table



System Architecture



Home Page for Company Users

The screenshot shows a web browser window displaying the DRIVEN-4 application. The browser's address bar shows the URL `127.0.0.1:5000/home`. The application has a dark blue sidebar on the left with the following menu items: Home, Device Management, Data Management, Data Analysis, User Management, Account Settings, and Billing. The main content area is white and features the DRIVEN-4 logo and the text "Welcome dongyu dongyu@dongyudairy.com (admin)". Below this, there is a "Home" section with a "Device Information" table. The table lists several devices with their status, serial numbers, and IMEI numbers. At the bottom of the page, there is a "Subscription Information" section with three cards: "Modules", "Storage Usage", and "Billing Details".

Device Name	Status	Serial No.	IMEI
facility	Inactive	WU5X9VHM9PER9A4N	350857120901940
IT_office	Inactive	WSX3QRXM9PQS45XC	350857120904403
Device Test	Inactive	None	TEST1234
Device Test	Active	None	893274091827340
Samsung Galaxy S21	Inactive	None	IMEI1234
Samsung S24	Inactive	None	IMEI2444



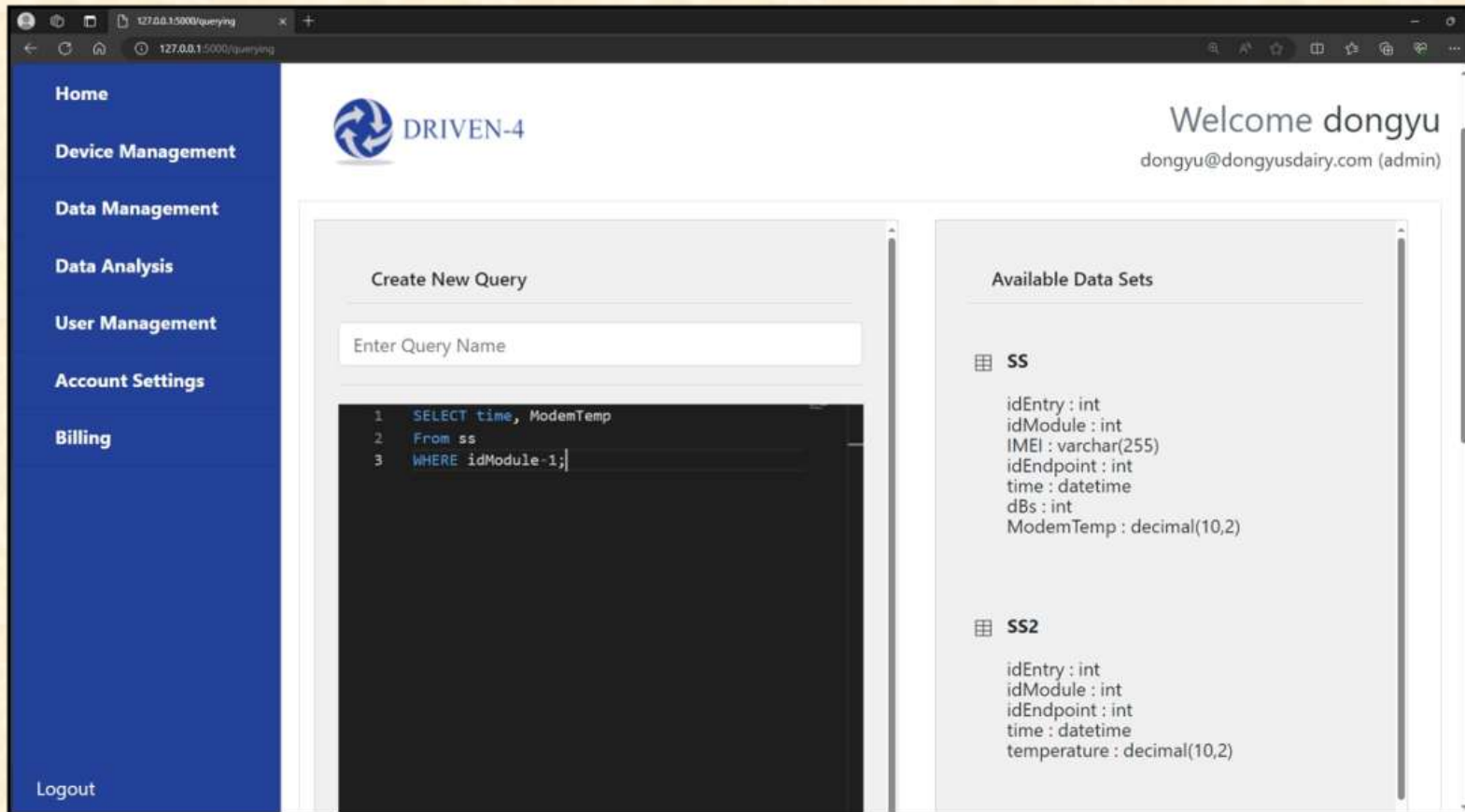
Device Management Page

The screenshot shows a web browser window with the URL `127.0.0.1:5000/device-management`. The page features a dark blue sidebar on the left with the following menu items: Home, Device Management, Data Management, Data Analysis, User Management, Account Settings, and Billing. At the bottom of the sidebar is a 'Logout' link. The main content area has a white background and includes the DRIVEN-4 logo and a welcome message for 'dongyu' (admin) with the email `dongyu@dongyusdairy.com`. Below the header, there is a 'Devices' section with a search bar and a 'Search' button. The search criteria are set to 'Name'. There are two buttons: 'Register Device' and 'Upgrade All'. The device list contains four entries:

Name	ID	Firmware Name	Status	Actions
facility	1	None	Inactive	Toggle Active, Download, Settings
IT_office	8	None	Inactive	Toggle Active, Download, Settings
Device Test	11	None	Active	Toggle Active, Download, Settings
Device Test	12	None	Inactive	Toggle Active, Download, Settings



Data Analysis Page



The screenshot shows a web application interface for 'DRIVEN-4'. On the left is a blue sidebar with navigation links: Home, Device Management, Data Management, Data Analysis, User Management, Account Settings, and Billing. At the bottom of the sidebar is a 'Logout' button. The main content area has a white header with the 'DRIVEN-4' logo and a welcome message: 'Welcome dongyu' and 'dongyu@dongyusdairy.com (admin)'. Below the header, there are two main panels. The left panel is titled 'Create New Query' and contains a text input field labeled 'Enter Query Name' and a code editor with the following SQL query:

```
1 SELECT time, ModemTemp
2 From ss
3 WHERE idModule=1;
```

 The right panel is titled 'Available Data Sets' and lists two data sets: 'SS' and 'SS2'. The 'SS' data set has fields: idEntry : int, idModule : int, IMEI : varchar(255), idEndpoint : int, time : datetime, dBs : int, and ModemTemp : decimal(10,2). The 'SS2' data set has fields: idEntry : int, idModule : int, idEndpoint : int, time : datetime, and temperature : decimal(10,2).



Payment Information Page

The screenshot shows a web browser window displaying the 'Payment Information' page of the DRIVEN-4 application. The browser's address bar shows the URL '127.0.0.1:5000/payment-information'. The page features a dark blue sidebar on the left with navigation links: Home, Device Management, Data Management, Data Analysis, User Management, Account Settings, Billing, and Payment Information (which is currently selected). At the bottom of the sidebar is a 'Logout' link. The main content area has a white background and includes the DRIVEN-4 logo and the text 'Welcome dongyu dongyu@dongyusdairy.com (admin)'. Below this, the heading 'Payment Information' is displayed. A central white card contains the following information: 'Payment Due' (title), '\$15.00' (Due Amount), and '31-08-2023' (Due Date). A blue button labeled 'Pay with Credit Card' is positioned at the bottom of the card.

Home

Device Management

Data Management

Data Analysis

User Management

Account Settings

Billing

Billing Information

Payment Information

Logout

DRIVEN-4

Welcome dongyu
dongyu@dongyusdairy.com (admin)

Payment Information

Payment Due

\$15.00
Due Amount

31-08-2023
Due Date

Pay with Credit Card



What's left to do?

- Data analysis page, make user experience simplified
- Update visual style to be consistent across application
- User can create custom database tables depending on input
- User management/administration



Questions?

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