

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

# Beta Presentation

## Autonomous Vehicle Fleet Connectivity App

### The Capstone Experience

Team Aptiv

Emilio Castillo

Drew Glapa

Klint Kaercher

Chad Krause

Alexander Patton



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

Department of Computer Science and Engineering  
Michigan State University  
Fall 2018

# Project Overview

---

- Functionalities

- Provide tools to manage an autonomous vehicle fleet

- Features

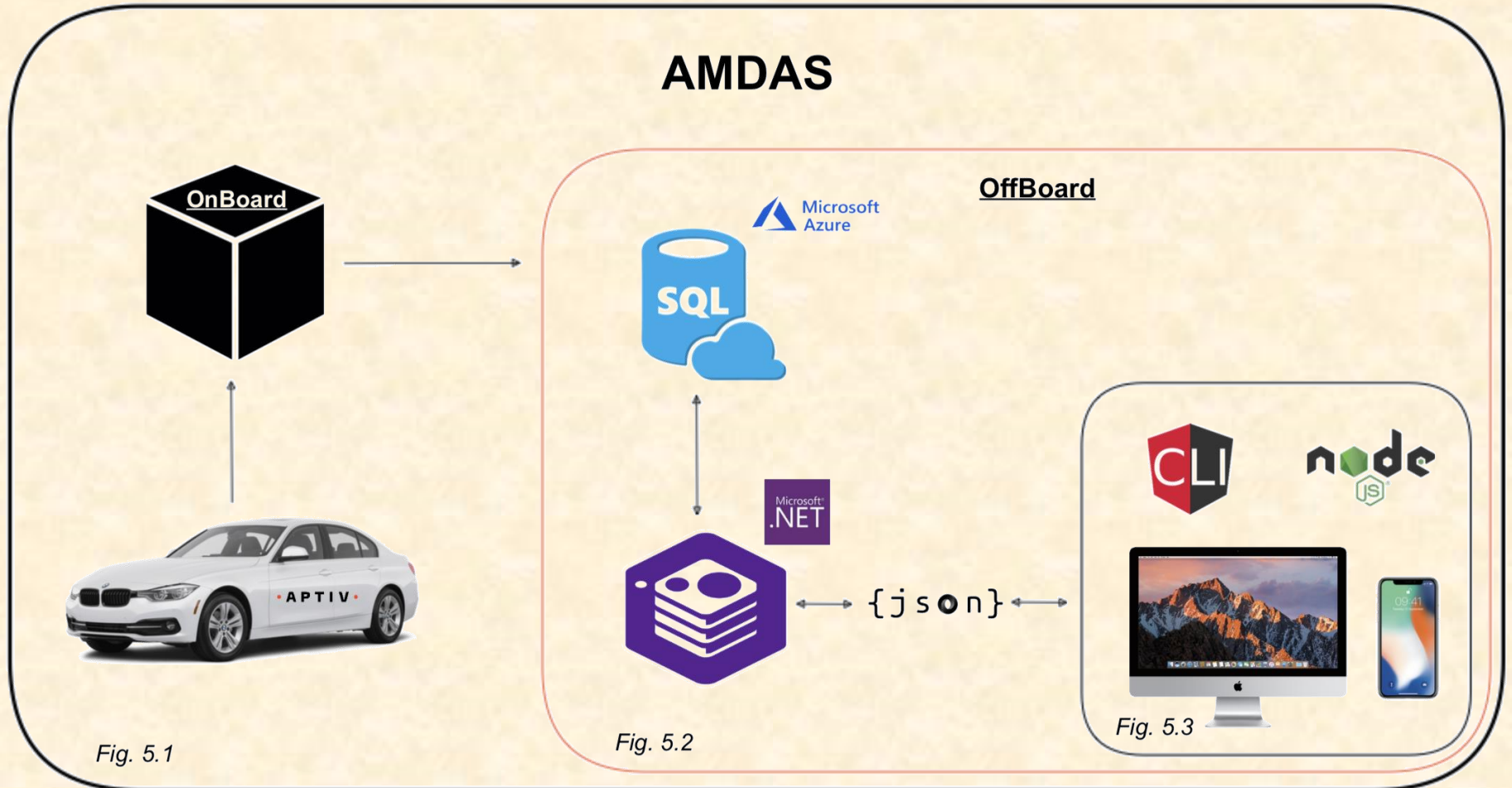
- Catalogue information about vehicles
- Send push notifications from app about vehicles
- See real-time alerts and diagnostics of vehicles
- Provide a driver survey at the end of scheduled testing

- Technologies

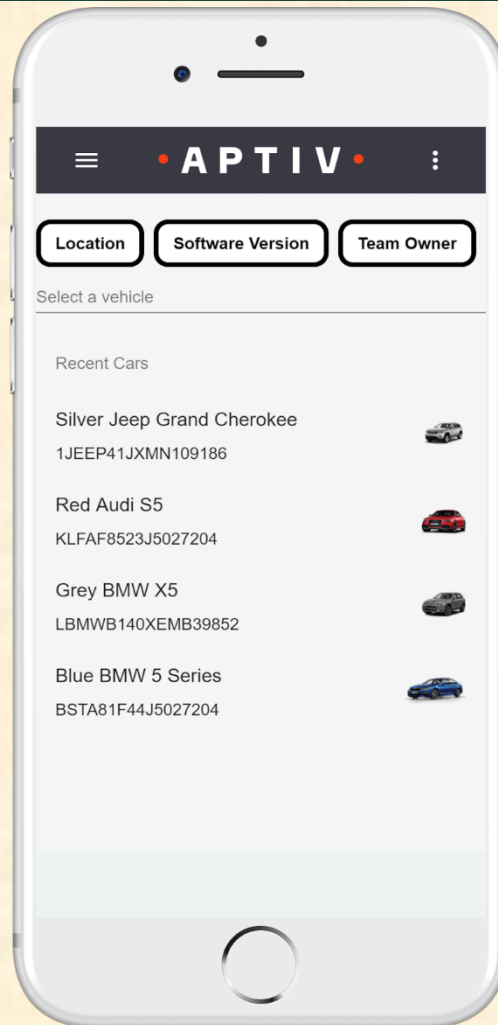
- Angular
- Microsoft Azure Services



# System Architecture



# Vehicle Search Page



# Vehicle Status Page

The screenshot shows a web browser window displaying the APTIV Vehicle Status Page for a Red Audi S5. The browser's address bar shows a search prompt. The page header features the APTIV logo. The main content area includes a vehicle image, a map showing the vehicle's location, and a table of live data.

**Vehicle Information:**

- Red Audi S5
- KLFAF8523J5027204

**Map:** The map shows the vehicle's location in Dublin, Ireland, near the River Liffey. A tooltip displays the coordinates: 53.344, -6.236.

**Live Data:**

Live Data	
VIN	KLFAF8523J5027204
Location	Dublin, Ireland
Odometer	44586
Speed	65 mph
Current Driver	Chad Krause
Software Version	4.3.2
Warnings	<a href="#">View</a>

**Upcoming Reservations:**

There are no upcoming reservations for the Red Audi S5.



# Reservation Creation Page

APTIV

Red Audi S5  
KLFAF8523J5027204

Vehicle Status

Type MM/DD/YYYY or choose a date.  
12/15/2018

X

Driver  
Chad Krause ☒ Me

Start

+ 8 - 00  
AM

End



+ 11 - 30  
AM

☐ Book Overnight

Cancel Create Reservation



# My Reservations Page

APTIV

## My Reservations

Upcoming

Past


November 1 10:30 AM

Blue BMW 5 Series

BSTA81F44J5027204

Location: Troy, MI

Driver: Ross Maguire




October 28 7:30 AM

Red Chevrolet Tahoe

CTFA81D2BB5027339

Location: Dublin, Ireland

Driver: Joe Lyon




October 25 6:00 PM

Red Audi S5

KLFAF8523J5027204

Location: Kokomo, IN

Driver: Clint Kaercher




October 25 4:00 PM

White Lexus LFA

JLFA81D23J5027204

Location: Kokomo, IN

Driver: Chad Krause



October 23 11:00 AM



# What's left to do?

---

- Aptiv engineer testing
- User permission restrictions
- In-depth browser testing



# Questions?

---

?

?

?

?

?

?

?

?

?

