

MICHIGAN STATE

UNIVERSITY

Beta Presentation

Ford Mobility Product Metrics

The Capstone Experience

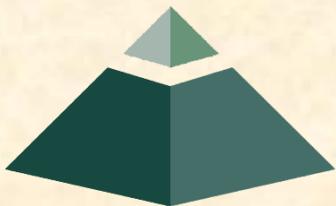
Team Ford

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From Students...
...to Professionals

Department of Computer Science and Engineering
Michigan State University

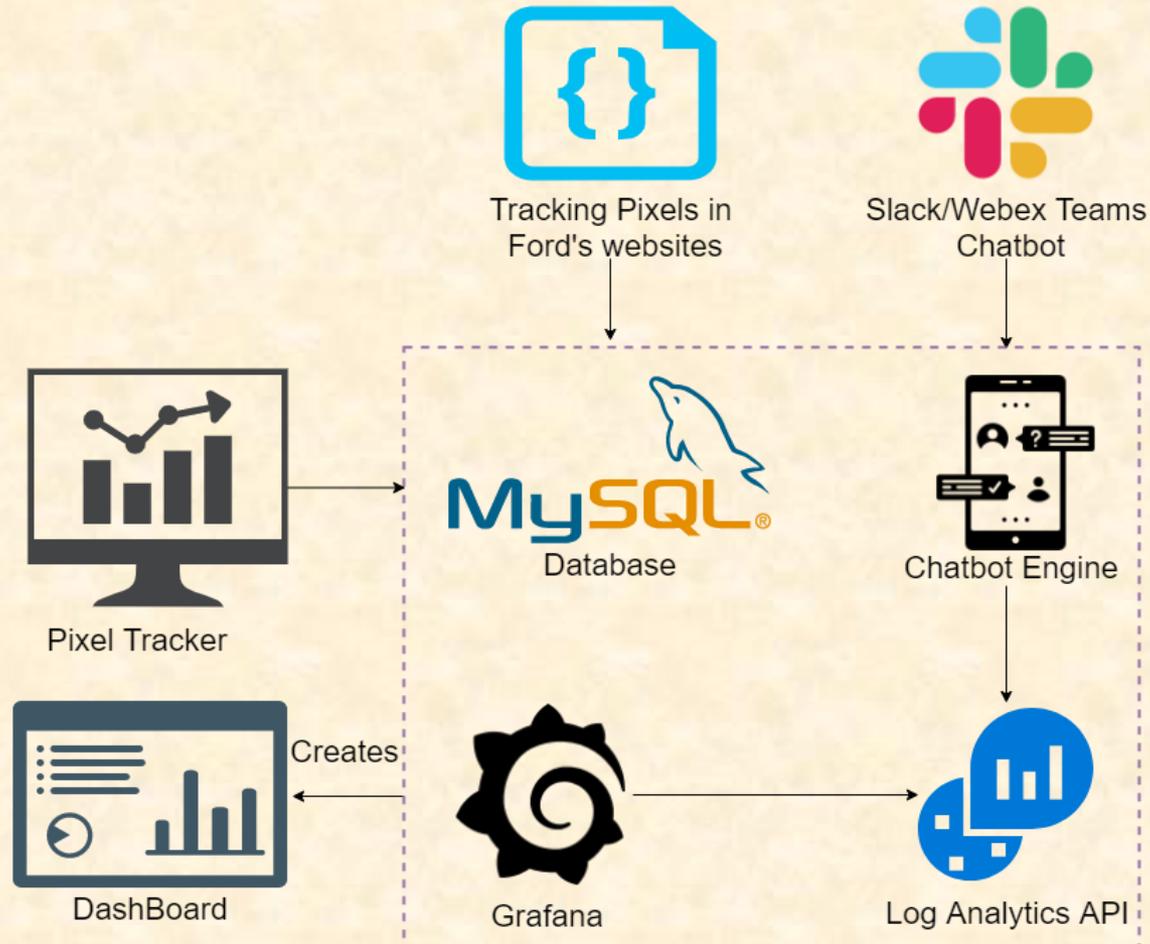
Fall 2019

Project Overview

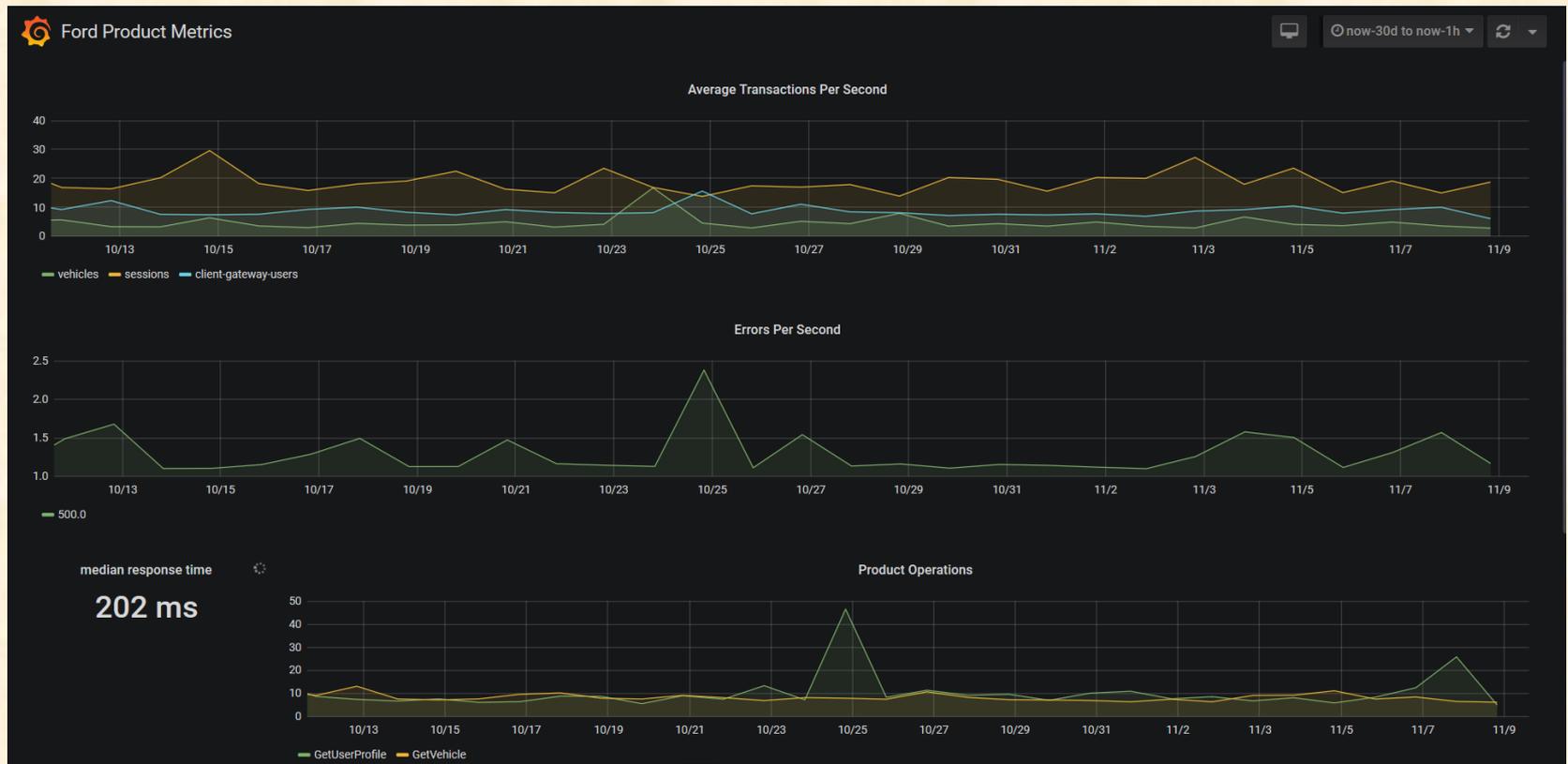
- Monitor Ford's products closely to store metrics to give a better customer experience
- WebEx Teams and Slack chatbots provide product metrics updates
- Created a dashboard to visualize those metrics



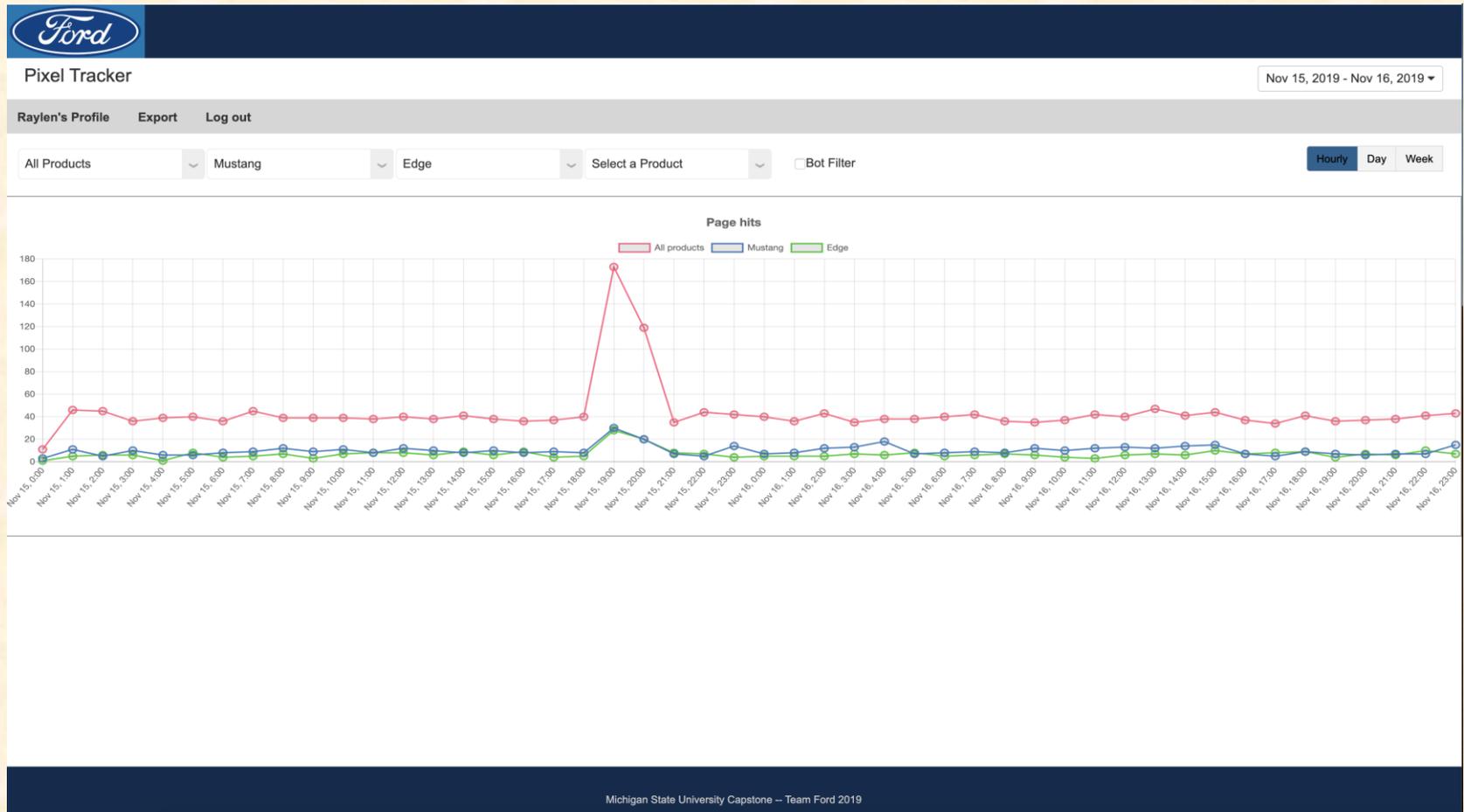
System Architecture



Ford Product Metrics Dashboard



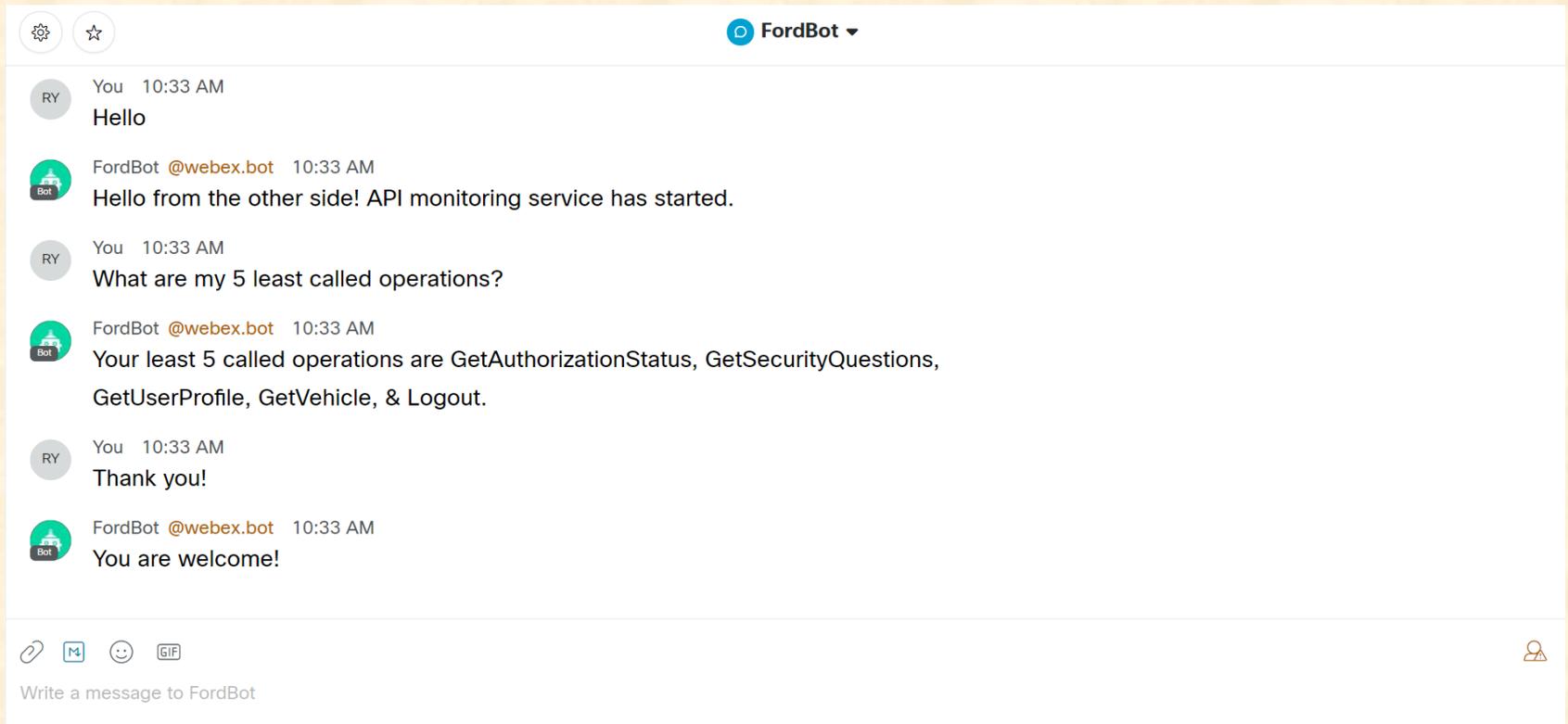
Pixel Tracker



Michigan State University Capstone – Team Ford 2019



WebEx Teams Chatbot



The screenshot shows a chat window titled "FordBot" with a dropdown arrow. At the top left are icons for settings and a star. The chat history includes:

- You** 10:33 AM: Hello
- FordBot @webex.bot** 10:33 AM: Hello from the other side! API monitoring service has started.
- You** 10:33 AM: What are my 5 least called operations?
- FordBot @webex.bot** 10:33 AM: Your least 5 called operations are GetAuthorizationStatus, GetSecurityQuestions, GetUserProfile, GetVehicle, & Logout.
- You** 10:33 AM: Thank you!
- FordBot @webex.bot** 10:33 AM: You are welcome!

At the bottom, there is a text input field with the placeholder "Write a message to FordBot" and icons for attachments, video, emojis, and GIFs. A user profile icon is visible on the right side of the input area.



Slack Chatbot

The screenshot shows a Slack chat interface for a channel named "Ford-Assistant". The chat history includes the following messages:

- Ford-Assistant** (APP) 9:21 AM: Hello from the other side! API monitoring service has started.
- Romi** 9:22 AM: How is my product usage trending week over week?
- Ford-Assistant** (APP) 9:22 AM: Here is a summary of product usage for all products over the past 4 weeks:
 - For the week of 10-14-19, there were 202342 hits.
 - For the week of 10-21-19, the number of hits increased to 4143268 hits.
 - For the week of 10-28-19, the number of hits decreased to 3655417 hits.
 - For the week of 11-04-19, the number of hits increased to 4199843 hits.
- Romi** 9:22 AM: What is my least called operation?
- Ford-Assistant** (APP) 9:22 AM: Your least called operation is GetAuthorizationStatus with 16478 hits in the past 24 hours.
- Romi** 9:22 AM: What is the average response time for GetAuthorizationStatus?
- Ford-Assistant** (APP) 9:22 AM: The average response time for the operation 'GetAuthorizationStatus' is 270.31 ms.
- Romi** 9:22 AM: Thank you!
- Ford-Assistant** (APP) 9:22 AM: You are welcome!

The input field at the bottom contains the text "Message Ford-Assistant".



What's left to do?

- Confirm that all requirements are met
- Add more information to the chatbot reports (stretch goal)
- Add the ability to allow users to update/delete existing tracking pixels



Questions?

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