From Students…
…to Professionals

Alpha Presentation
Feedback Prompt for Ratings in Google Play Store
The Capstone Experience

Team Microsoft
Justin Hollinshead
Jordan Hybki
Karn Jongnarangsinsin
Moeez Khan

Department of Computer Science and Engineering
Michigan State University
Fall 2021
Project Overview

- Build a system for Microsoft employees to receive and analyze end user feedback of the Intune Company Portal app:
  - In-app feedback prompt for users to effortlessly leave a review in the Google Play Store
  - Use sentiment analysis in conjunction with classification to determine user sentiment and identify app issues
  - Automated generation and delivery of easily digestible analysis reports via Microsoft Teams Bot
System Architecture

Review Sources + APIs

Azure SQL Database

Natural Language Processing

Developers

GitHub

Twitter

Facebook

Keras

Teams Bot Interface
Sample App In-app Review Prompt
Microsoft Teams Bot Output 1

Hey there. Here’s your monthly feedback report:

Let’s start by looking at how many new reviews have been posted each month over the past year.

Next, let’s look at the average rating score of each month over the past year.
Microsoft Teams Bot Output 2

As the reports show, Intune is getting many more reviews over time, the app’s average rating performed particularly well over the spring, and the sentiment of the reviews skews a bit negative.
E-mail Output

Hey there. Here’s your monthly feedback report:

Let’s start by looking at how many new reviews have been posted each month over the past year.

Reviews Over Time

Next, let’s look at the average rating score of each month over the past year.

Average Ratings Over Time
What’s left to do?

• Add comparative analyses with competing apps
• Refine classification models to identify present bugs/features from user feedback
• Add graphs for bug/issues classifications
• Improve sentiment analysis with additional pre-processing layers, more comprehensive training data, and compounded methods
• Improving the graph visuals and content
Questions?