# MICHIGAN STATE UNIVERSITY Project Plan Presentation "Ally Kudos"

#### The Capstone Experience

#### **Team Ally**

Phillip Yu Abby Peterson Harrison McComb Gatesana Vongphachanh Phumapiwat Chanyutthagorn

Department of Computer Science and Engineering Michigan State University

Fall 2022



From Students... ...to Professionals

# **Project Sponsor Overview**

#### Committed beyond banking.

- Leading digital financial service company
- Ally Bank<sup>®</sup>: award-winning, offers home loans, a full suite of banking products including individual retirement accounts
- Ally Invest<sup>®</sup> offers investmentadvisory services
- Robust corporate finance business offers capital for equity sponsors and middle-market companies
- Pride in organization culture and putting the customer first





The Capstone Experience

## **Project Functional Specifications**

- Employee recognition
- How to create a bigger impact?
- 5 main goals:
  - Great employee experience
  - Creating lasting memories
  - Driving peer-to-peer recognition
  - Time recognition
  - Boundaryless recognition

## **Project Design Specifications**

- Ally employee will log into the private web-app and access their dashboard
- User dashboard showcases "kudos", sent and received statistics, and "kudos" history
- Option to "Send Kudos" takes the user to a new page where the message and "kudos" will be drafted with machine learning guidance if desired, then sent
- Managers and admin have access to a statistics page that showcases user interaction and important "kudos" of the employees they oversee

# Screen Mockup: Dashboard



## Screen Mockup: Craft "Kudos" Message

+ kudos.com/send-kudos	<ul> <li>д</li> </ul>
ally . kudos	
Make Someone's day better	
Write your measage down. Next Back to Home	

## Screen Mockup: "Gratitude Wizard"

Ally Kudos ← → C (A https://www	× + ally-kudos.com/send-kudos		v - a
	ally	. kudos	
	Add something extra           we couldn't do this without you         •           You're inspiring         You're the best           Write your own         •	Emma, thank you for your hard work on Friday. We couldn't do this without you.	7
	Add More Back Next	Back to Home	

## Screen Mockup: Assign "Kudos" Amount



The Capstone Experience

#### Screen Mockup: Send "Kudos" Message



## **Project Technical Specifications**

- Dashboard with statistics, message history sidebar, and redirect to page with envelope component for gratitude wizard and custom message drafts
- AWS Lambda responds to events, AWS API Gateway allows for real-time communication, Postman will help developers test
- Database built on AWS Aurora RDS and AWS S3 for structured and unstructured data (MySQL compatible), machine learning message suggestions with PyTorch

The Capstone Experience

# System Architecture



#### System Components

- Hardware Platforms
  - iMac, PC, and mobile devices for testing
- Software Platforms / Technologies
  - MySQL, PyTorch
  - Postman, AWS

Aurora, API Gateway, Lambda, RDS, S3

React, Tailwind CSS, Material UI, React Router, React-vis

## Risks

#### Risk 1: Machine Learning

- Uncertain how to use machine learning to help user make messages and suggesting the number of "kudos" based on the message content
- Research, ask for guidance from client and making tests/prototypes
- Risk 2: Real-time Notification Update
  - Unsure of the process, efficiency, or timing of when the update come up
  - Two members has experiences from class, will research and make prototypes
- Risk 3: Privacy vs Being Seen
  - Find the balance between employees feeling appreciated and still having privacy, not being directly open to be judged or compared
  - Option to share publicly when user sends/receives message, share survey with Ally
- Risk 4: Mitigation of Misuse
  - There is a possibility of the web-app being misused such as inappropriate language, complaints, and threats through "kudos" messages
  - Persuade or add friction to make misuse harder such as flag harsh words, have manager see kudos to adjust if needed

## **Questions?**

