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[®]: award-winning, offers home loans, a full suite of banking products including individual retirement accounts
- Ally Invest[®] 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

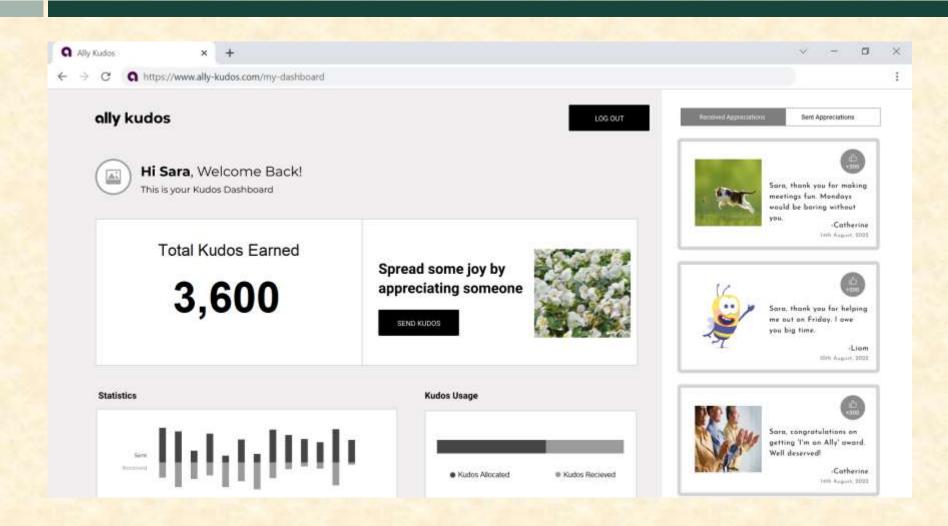
Project Functional Specifications

- 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



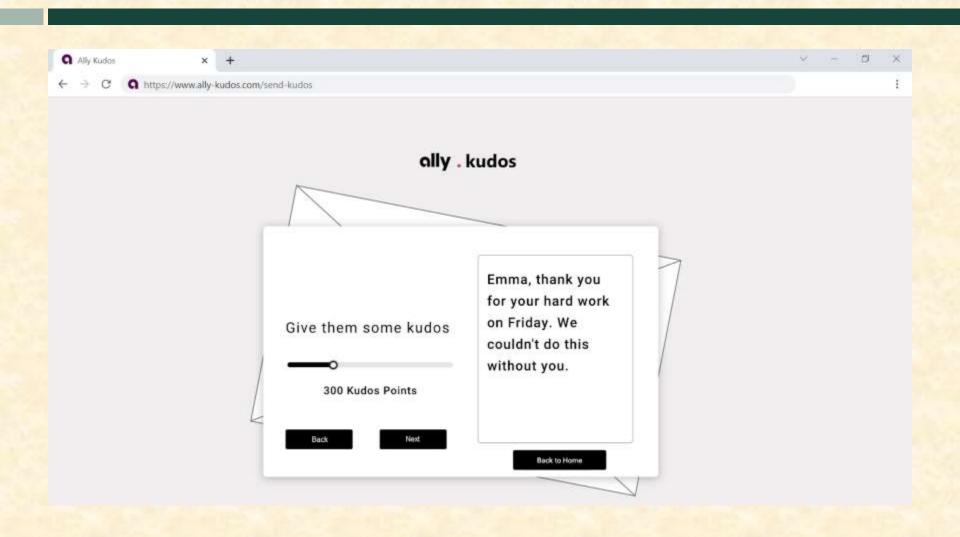
Screen Mockup: Craft "Kudos" Message

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

Screen Mockup: "Gratitude Wizard"

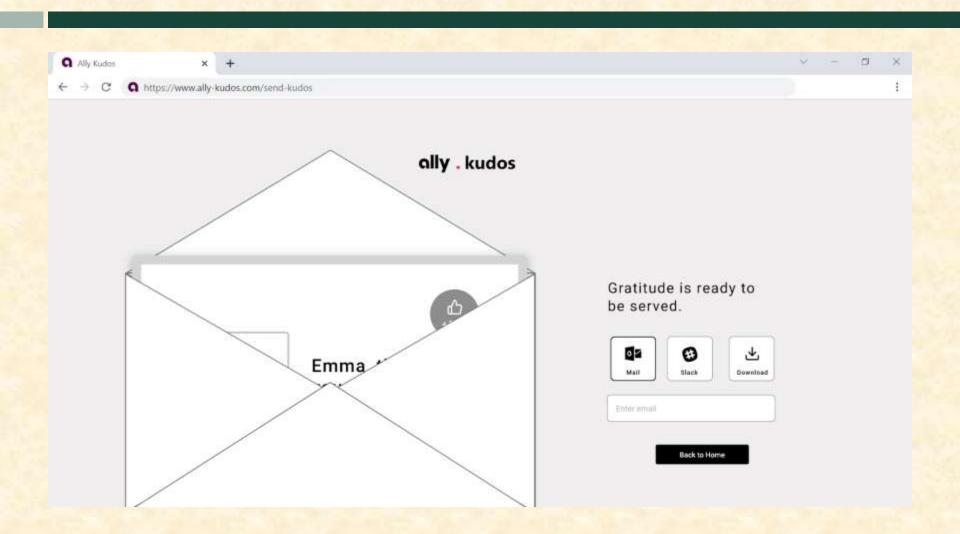
Ally Kudos ← → C (A https://www	× + ally-kudos.com/send-kudos		v - a
	ally	. kudos	
	Add something extra we couldn't do this without you • You're inspiring You're the best Write your own •	Emma, thank you for your hard work on Friday. We couldn't do this without you.	7
	Add More Back Next	Back to Home	

Screen Mockup: Assign "Kudos" Amount



The Capstone Experience

Screen Mockup: Send "Kudos" Message

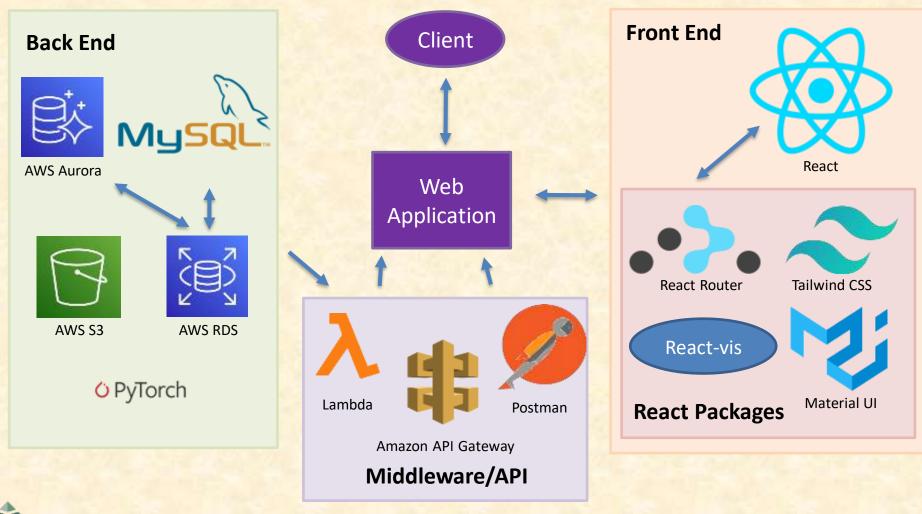


Project Technical Specifications

- 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?

