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

Project Plan Presentation
P2P Lending Platform

The Capstone Experience

Team Ally

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Spring 2022

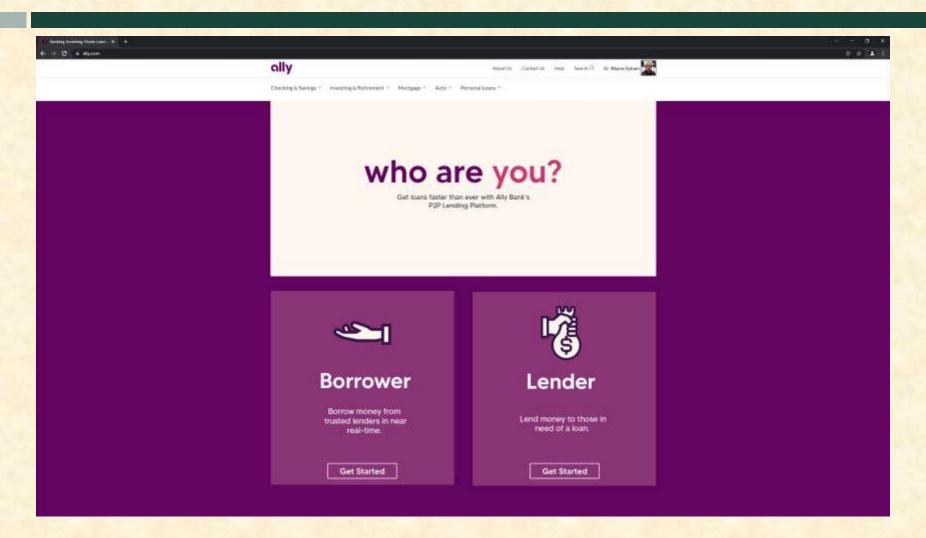*From Students…*
…to Professionals

Functional Specifications

- Our web app looks to connect Ally Bank clients with one another to eliminate the need of a middleman
- Grants the ability for clients to lend and gain financial capital
- Allows clients to borrow for lower interest fees than they would from a bank
- Allows the client that borrows to combine loan offers from other clients
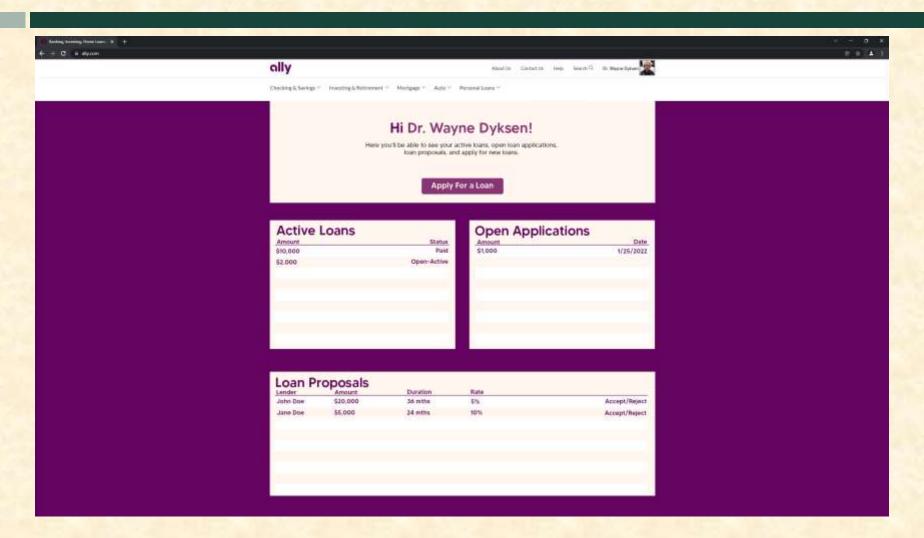
Design Specifications

- User is directed to main page where they identify themselves as either a borrower or lender

- Borrowers can view active loans, open applications, and proposals from other lenders
  - Can request a new loan

- Lenders can view active loans and new loan requests from borrowers
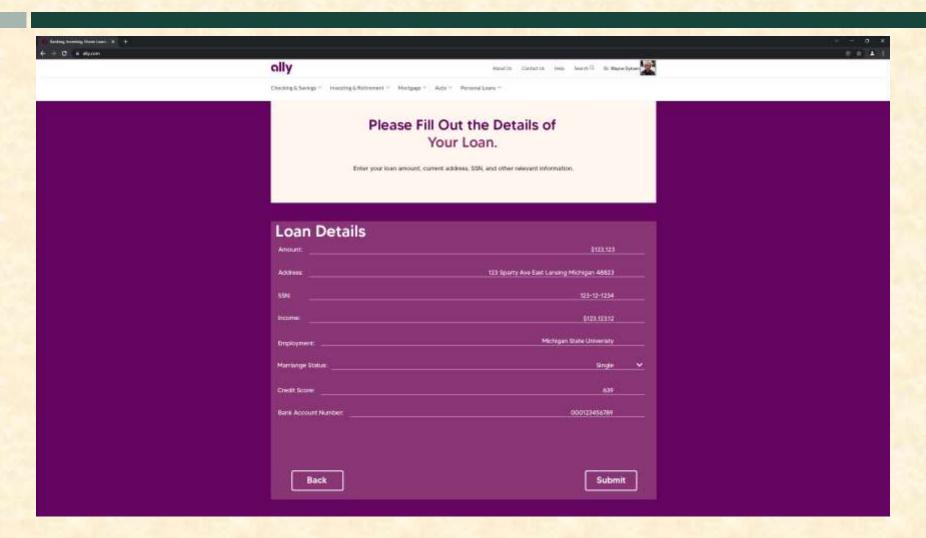 - Can submit a proposal based on loan request
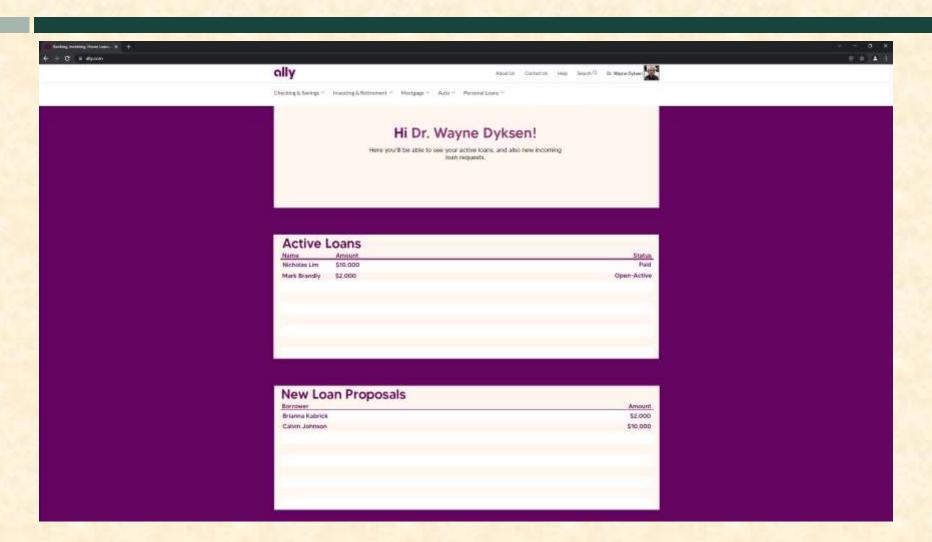
Screen Mockup: Main Screen
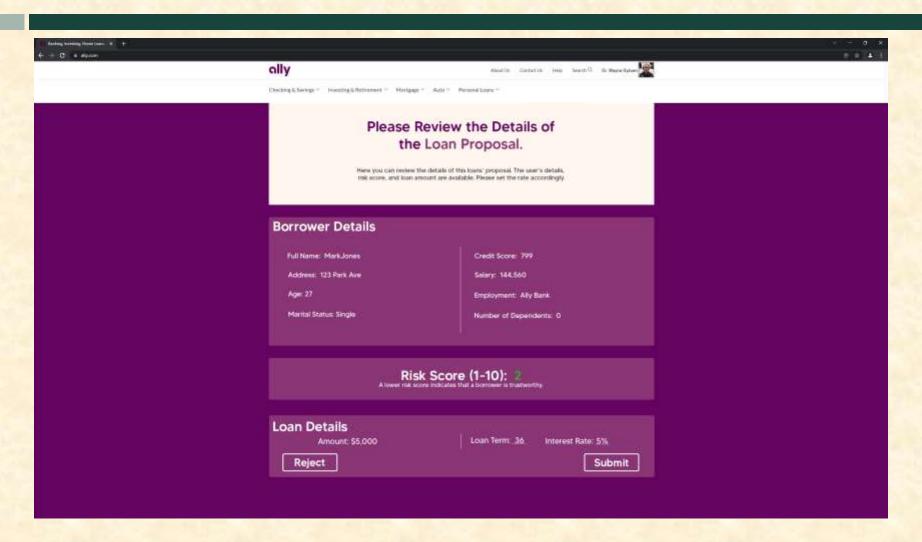
Screen Mockup: Borrower

Screen Mockup: Apply For a Loan
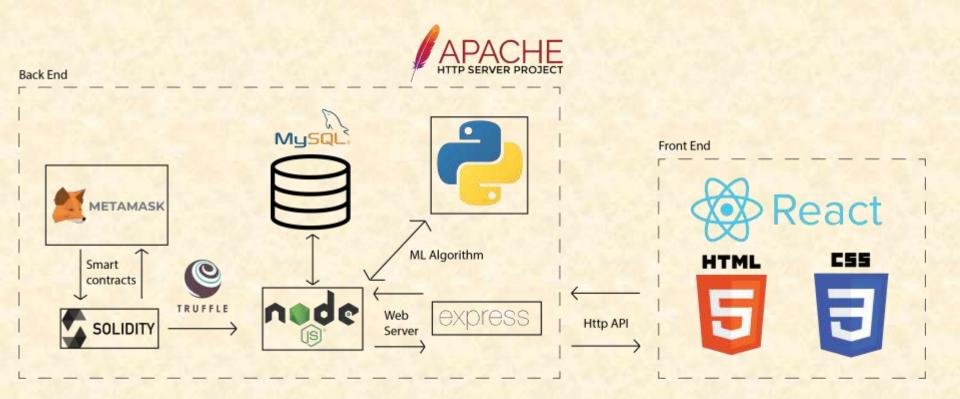
Screen Mockup: Lender

Screen Mockup: Review a Loan

Technical Specifications

- Ethereum Blockchain

- NodeJS

- ReactJS

- Machine Learning

System Architecture

System Components

- Hardware Platforms
  - IMAC, Smart Phone

- Software Platforms / Technologies
  - VS Code, React
  - Ethereum private blockchain network
  - Lambda, S3, Api Gateway
  - Truffle

Risks

- Risk 1
  - Wallets could be completely separate from a bank account
  - Consider an external wallet handler
- Risk 2
  - Clients may not pay back their loans
  - Will need to incentivize clients by implementing a risk score, and possibly penalize the client's credit score
- Risk 3
  - Clients who want to borrow anonymously are not trustworthy
  - Use client's wallet transaction history to assign risk scores to borrowers
- Risk 4
  - All information on the blockchain could technically be accessed, including confidential information like a social security number
  - Will look into an off-chain database to hold important information off the chain

Questions?