

MICHIGAN STATE

UNIVERSITY

Alpha Presentation

Ally P2P Lending Platform

The Capstone Experience

Team Ally

Ray Sufyan

Nick Lim

Johannes Shin

Mark Brandly

Rocco Wu

Sonali Reddy

Department of Computer Science and Engineering
Michigan State University

Spring 2022



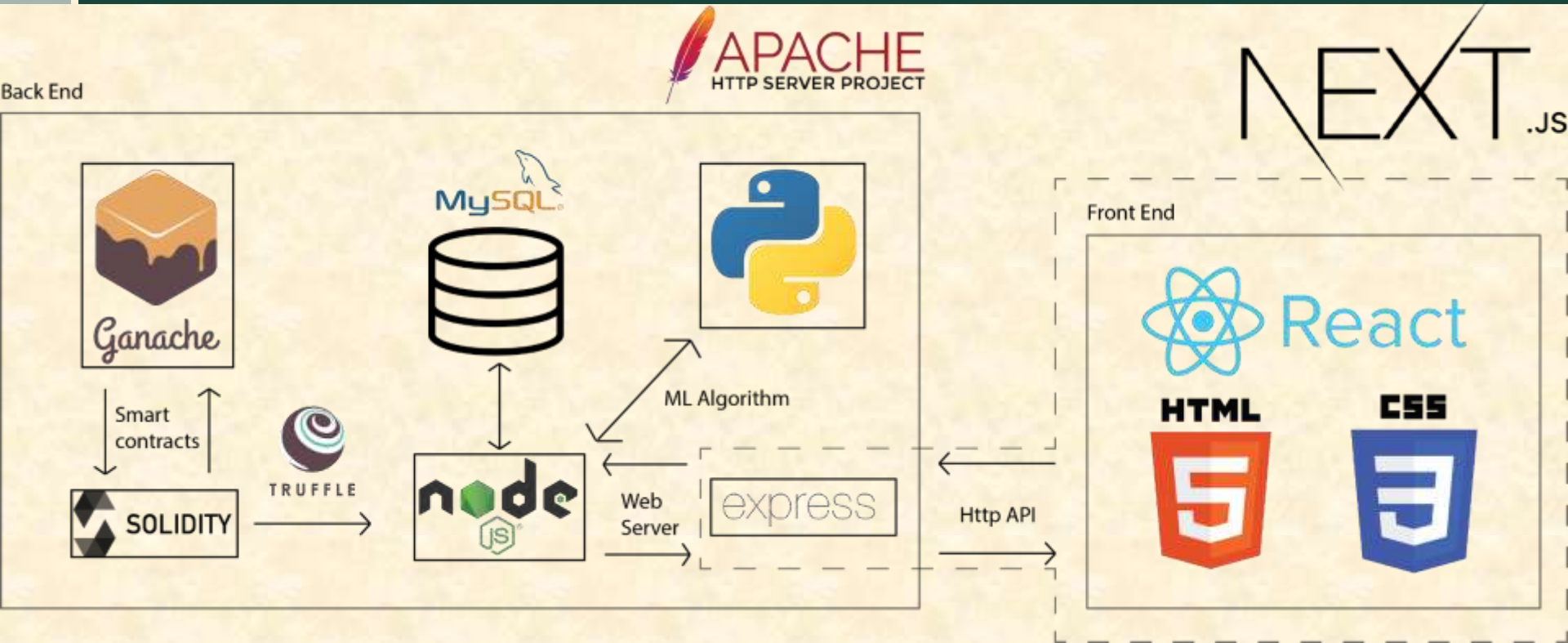
*From Students...
...to Professionals*

Project Overview

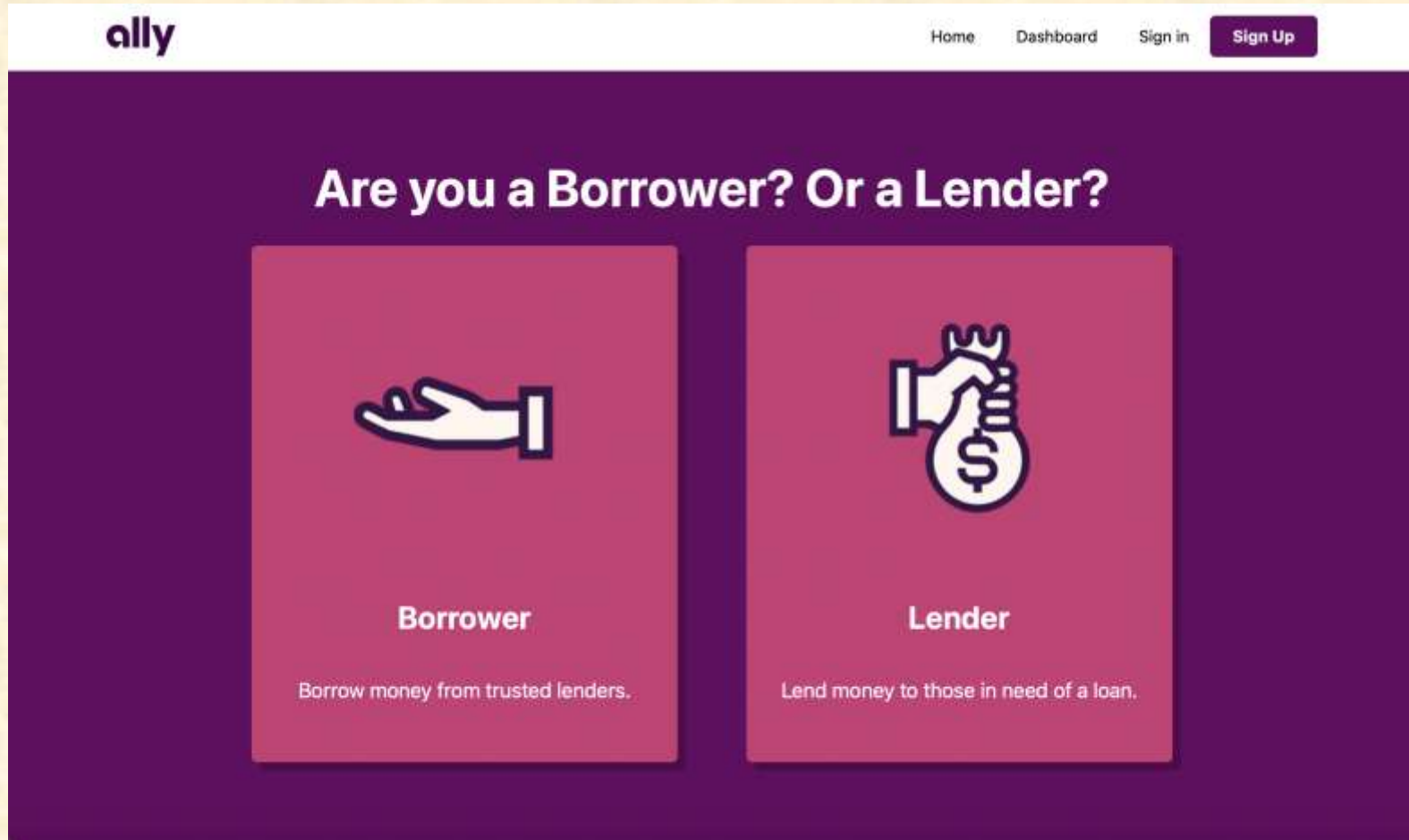
- Ethereum Blockchain based P2P lending platform
 - Enables quicker loan processing time and requires less loan documentation
- Removes the middleman
- Incorporation of Smart Contracts for transfers and repayments
- Develop a user-friendly UI for Ally clients



System Architecture



Main Page



User Dashboard

The screenshot shows the Ally user dashboard. At the top, there is a navigation bar with the Ally logo, and links for Home, Dashboard, Sign in, and a Sign Up button. The main content area is titled "Dashboard" and includes a sub-header "Here you'll be able to view both your borrower and lender activity".

Borrow
Here you can see your active loans, open loan applications, loan proposals, and apply for new loans.

Active Loans

LOAN AMOUNT	LOAN STATUS
\$10,000	Paid
\$2,000	Open-Active

Open Applications

LOAN AMOUNT	APPLICATION DATE
\$1,000	1/26/2022

Loan Proposals

NAME	LOAN AMOUNT	LOAN DURATION	INTEREST RATE	
John Doe	\$20,000	36 mths	5%	Review

[Apply for a Loan >](#)

Lend
Here you can see your active loans, and also new incoming loan requests.

Active Loans

LOAN AMOUNT	LOAN STATUS
\$6,000	Open-Active

Loan Proposal Details

The screenshot displays the Ally website interface. At the top left is the 'ally' logo. On the top right, there are navigation links for 'Home', 'Dashboard', and 'Sign In', along with a purple 'Sign Up' button. The main content area features a large white box with a purple border containing the heading 'Please Review the Details of the Loan Proposal.' and a paragraph of text. Below this is a purple section titled 'Borrower's Details' with a sub-paragraph. At the bottom is a table titled 'Borrower Details' listing various attributes and their values.

ally Home Dashboard Sign In **Sign Up**

Please Review the Details of the Loan Proposal.

Here you can review the details of this loan Proposal. The borrower's details, risk score, and the loan details are available for your convenience. You may change the duration and interest rate.

Borrower's Details

Here you can view the borrow's details. Use these to help determine if you would like to accept or reject this loan proposal.

Borrower Details	
CATEGORY	
Name	John Doe
Age	34
Gender	Male
Use Of Loan	Home Improvement
Education	Bachelors or higher
Marital Status	Married
Number of Dependents	2
Employment Status	Fully Employed
EmploymentDurationCurrentEmployer	More than 5 years
WorkExperience	15 to 25 years
OccupationArea	Finance and Insurance



Loan Proposal Details Continued

ally [Home](#) [Dashboard](#) [Sign in](#) [Sign Up](#)

Age	34
Gender	Male
Use Of Loan	Home Improvement
Education	Bachelors or higher
Marital Status	Married
Number of Dependents	2
Employment Status	Fully Employed
EmploymentDurationCurrentEmployer	More than 5 years
WorkExperience	15 to 25 years
OccupationArea	Finance and Insurance
Home Ownership Type	Owner
Income Total	\$106,603
No. Of Previous Loans Before Loan	5
Amount Of Previous Loans Before Loan	\$5000

Risk Score

2 Our risk score measures the likelihood of a borrower repaying a loan. The score ranges from 1-10, with a lower score indicating that a borrower is more likely to repay their loan on time.

Interest Rate and Loan Duration

Loan Duration (mths): Interest Rate (%):

[Reject](#) [Accept](#)



What's left to do?

- Task 1 :Lender will be able to repay loans with interest
- Task 2:Create a more polished User Interface
 - Build upon user profile UI and general UI mockups
- Task 3:Integrate machine learning algorithm into application
 - To provide a risk score for clients who request a loan



Questions?

?

?

?

?

?

?

?

?

?

