

MICHIGAN STATE

UNIVERSITY

Beta Presentation

Ally P2P Lending Platform

The Capstone Experience

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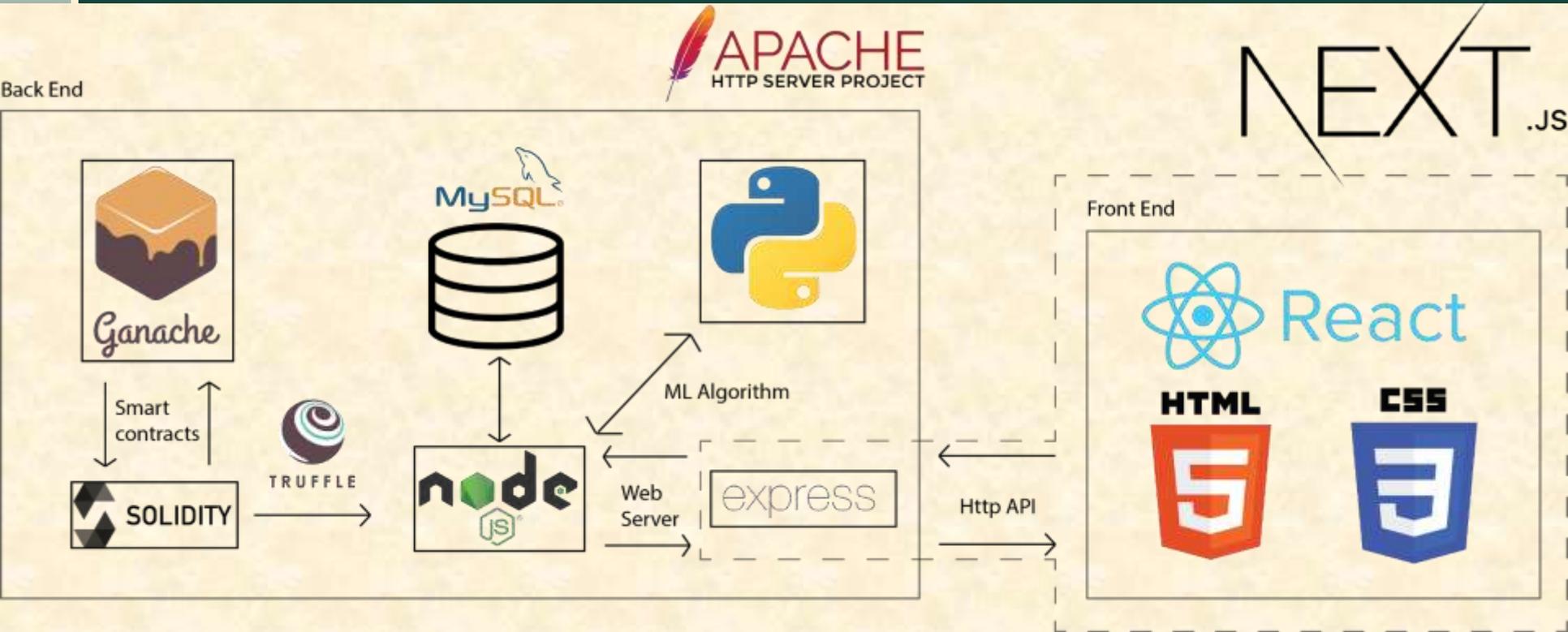
*From Students...
...to Professionals*

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



Dashboard – Borrower View 1

The screenshot shows the Ally Borrower Dashboard for a user named 'nick'. The page features a dark green header with the 'ally' logo and navigation links for 'Dashboard', 'Profile', and 'Sign Out'. Below the header, the user's name 'nick's Dashboard' is displayed, along with a sub-header: 'Here you'll be able to view both your borrower and lender activity.' A navigation bar allows switching between 'Borrow' and 'Lend' views. The main content area is divided into three sections: 'Your Wallet', 'Active Loans', and 'Apply for a loan'. The 'Your Wallet' section shows a purple bar with the wallet address 'dell296d79d4133d7a026c5428e6d75d810465d7', a balance of '1', and an estimated USD value of '2426.18'. The 'Active Loans' section features a circular progress indicator showing '90% Repaid' for a loan named 'brendlym1' with a status of '9d/100'. The 'Apply for a loan' section includes a white button for applying.

ally Dashboard Profile Sign Out

nick's Dashboard
Here you'll be able to view both your borrower and lender activity.

Borrow Lend

Your Wallet
Here you can view your wallet address and balance.

Address: dell296d79d4133d7a026c5428e6d75d810465d7
Balance: 1 Balance USD: 2426.18

Active Loans
Here you can view loans that you are actively repaying.

90% Repaid
brendlym1
9d/100

Apply for a loan
Here you can see your apply for a loan.



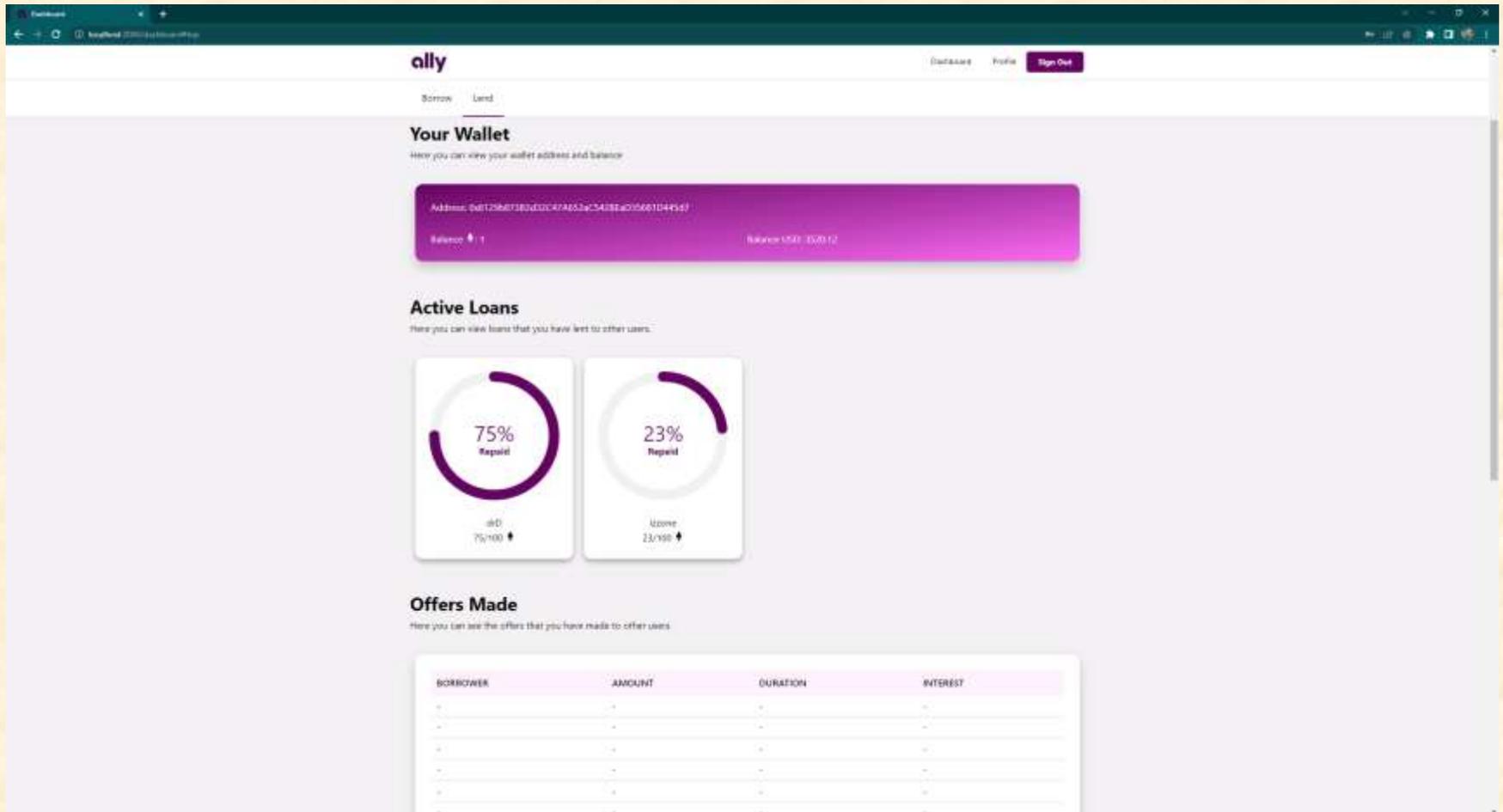
Dashboard – Borrower View 2

The screenshot displays the Ally Borrower Dashboard. At the top, there is a navigation bar with the Ally logo, a 'Dashboard' link, a 'Profile' link, and a 'Sign Out' button. Below the navigation bar, there are tabs for 'Borrow' and 'Lend', with 'Borrow' selected. A dropdown menu shows '30/100' with an upward arrow. The main content area is titled 'Apply for a loan' with the subtitle 'Here you can see your apply for a loan.' Below this is a form with three input fields: 'Loan Amount USD' (10000.00), 'Duration (days)' (30), and 'Use Of Loan' (Home impro.). A purple 'Apply for a Loan' button is positioned below the form. To the right of the form, there is a text prompt: 'Please enter the amount you would like to apply for, the duration, and select a category that most closely describes what you intend to use this loan for.' Below the form is a section titled 'Your Loan Requests' with the subtitle 'Here you can see your loan requests that not have not yet been accepted by a lender.' This section contains a table with the following columns: 'AMOUNT', 'APR DATE', 'DURATION', and 'PURPOSE'. The table is currently empty, displaying 'no loan proposals'.

AMOUNT	APR DATE	DURATION	PURPOSE
no loan proposals			



Dashboard – Lender View



Loan Review Screen

The screenshot displays the Ally Loan Review interface. At the top, the Ally logo is on the left, and navigation links for 'Database', 'Profile', and 'Sign Out' are on the right. The main heading is 'Borrower's Details', followed by a sub-heading: 'How you can view the borrower's details. Use these to help determine if you would like to accept or reject this loan proposal.' Below this is a table of borrower information. Underneath the table is a 'Risk Score' section with a score of 7 and an explanatory text. At the bottom, the text 'Accept or Reject' is visible.

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
Employment Duration Current Employer	More than 5 years
Work Experience	15 to 25 years
Occupation/Role	Finance and Insurance
Home Ownership Type	Owner
Income Total	\$104,000
No. Of Previous Loans Before Loan	3
Amount Of Previous Loans Before Loan	\$5000

Risk Score

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.

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This score is calculated using the information above, along with the intended use of the loan, and the borrower's transaction history.

Accept or Reject



What's left to do?

- Stretch Goals
 - User interface touch up. More consistent margins, padding, etc.
 - Finish unit tests for blockchain contract logic via Solidity test suite
 - Refactor some React components for organizational purposes
 - Comment and document code to prepare to hand it off to Ally Financial



Questions?

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