Project Plan Presentation
P2P Lending Platform

The Capstone Experience

Team Ally
Rothwan Sufyan
Rocco Wu
Nick Lim
Mark Brandly
Johannes Shin
Sonali Reddy

Department of Computer Science and Engineering
Michigan State University
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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

Hi Dr. Wayne Dyksen!
Here you'll be able to see your active loans, and also new incoming loan requests.

Active Loans

<table>
<thead>
<tr>
<th>Name</th>
<th>Amount</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicholas Lim</td>
<td>$10,000</td>
<td>Paid</td>
</tr>
<tr>
<td>Mark Brandy</td>
<td>$2,000</td>
<td>Open-Active</td>
</tr>
</tbody>
</table>

New Loan Proposals

<table>
<thead>
<tr>
<th>Borrower</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brianna Kabrick</td>
<td>$2,000</td>
</tr>
<tr>
<td>Calem Johnson</td>
<td>$10,000</td>
</tr>
</tbody>
</table>
Screen Mockup: Review a Loan

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Team Ally Project Plan Presentation
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?