From Students…
…to Professionals

MICHIGAN STATE UNIVERSITY

Alpha Presentation Fundamenta

The Capstone Experience

Team Quicken Loans

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Spring 2018
Project Overview

- Facilitates home building process
- Organizes participants involved in home build
- Displays workflow of home build
- Allows users to complete tasks
- Displays status of build
- Provides messaging capability between parties
- Manages workflow with blockchain technology
- Brings transparency to building process
System Architecture

Web App

- React JS
- .NET Core
- REST API
- Service Layer
- Database Layer

SQL Database

Hyperledger

- Fabric
  - Blockchain
  - Chaincode
  - Blockchain State Storage

- Composer
  - Business Network
  - Transactions
  - REST Server

Runtime API

Azure
Sign Up
Dashboard
New Build
Manage Builds
Build Status
Communication Page
What’s left to do?

• MVP
  ▪ Complete additional 8 steps in workflow
  ▪ Finish display of all home builds user is involved in
  ▪ Finish builder dashboard for assigning builds
  ▪ Create admin page
  ▪ Display blockchain visualization

• Post-MVP
  ▪ Submit alerts to users with tasks
  ▪ Add additional steps/extend options
  ▪ Implement file/picture uploads
  ▪ Connect to blockchain of QL sister company
  ▪ Extend Hyperledger Fabric blockchain
  ▪ Select lot in Google Maps
Questions?