

tradingpost



A Bartering System Web Application

Version 1.0

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By John, Jessica, Mana, Nina, and Cosi



Presentation Overview

1. Project Overview
 - a. Background
 - b. Motivation
 - c. Goals
2. Development
3. Demo
4. Future Enhancements





Overview: Background

- ❖ What is the Trading Post?
 - A bartering system
 - Trade goods and services
 - A web application
 - MEAN Stack





Overview: Motivation

❖ Why do we need it?



- ◆ Does not involve monetary exchange
- ◆ Encourages reuse
- ◆ Unpredictability of economic behavior



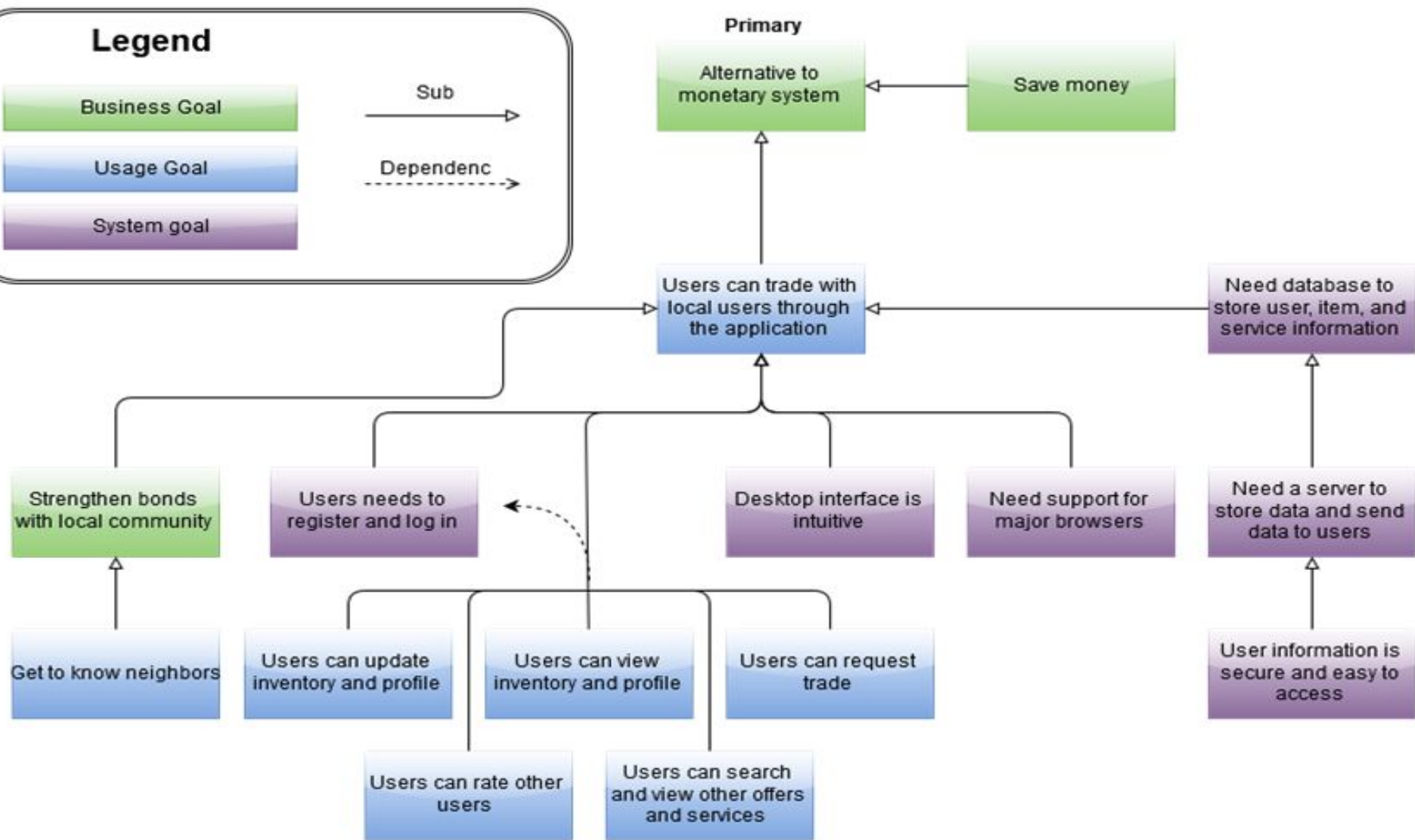
- ◆ Increase communication in local communities



Overview: Goals

- ❖ Provide an alternative to the monetary system
- ❖ Strengthen bonds in local communities
- ❖ Facilitate trade through the web application
 - Provides a means to trade
 - Offers convenience







Development

- ❖ Steps taken
 - Features
 - Visual design
 - Software framework
 - Design pattern
 - Database design
- ❖ Challenges





Development: Features

- ❖ Sort and search for goods and services
- ❖ Browse most recent posts
- ❖ Create an account
- ❖ Make trades with other users
- ❖ Fill out a profile, containing the user's:
 - wishlist, inventory, and trades





Development: **Visual Design**

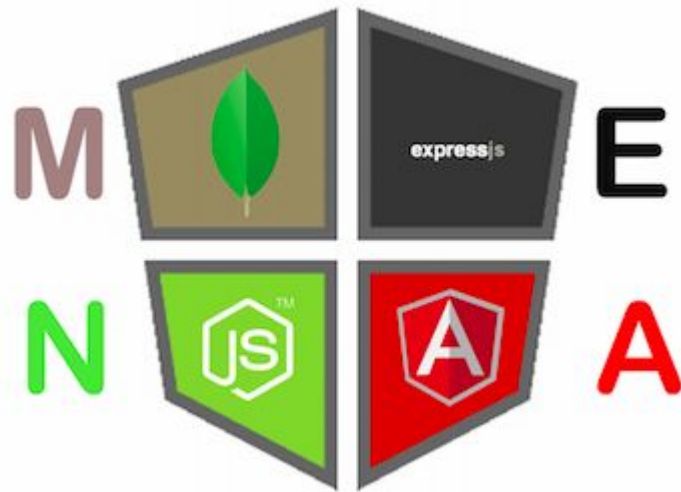
- ❖ Name origin
- ❖ Logo design
- ❖ Color scheme
- ❖ Layout overview
- ❖ Tools used

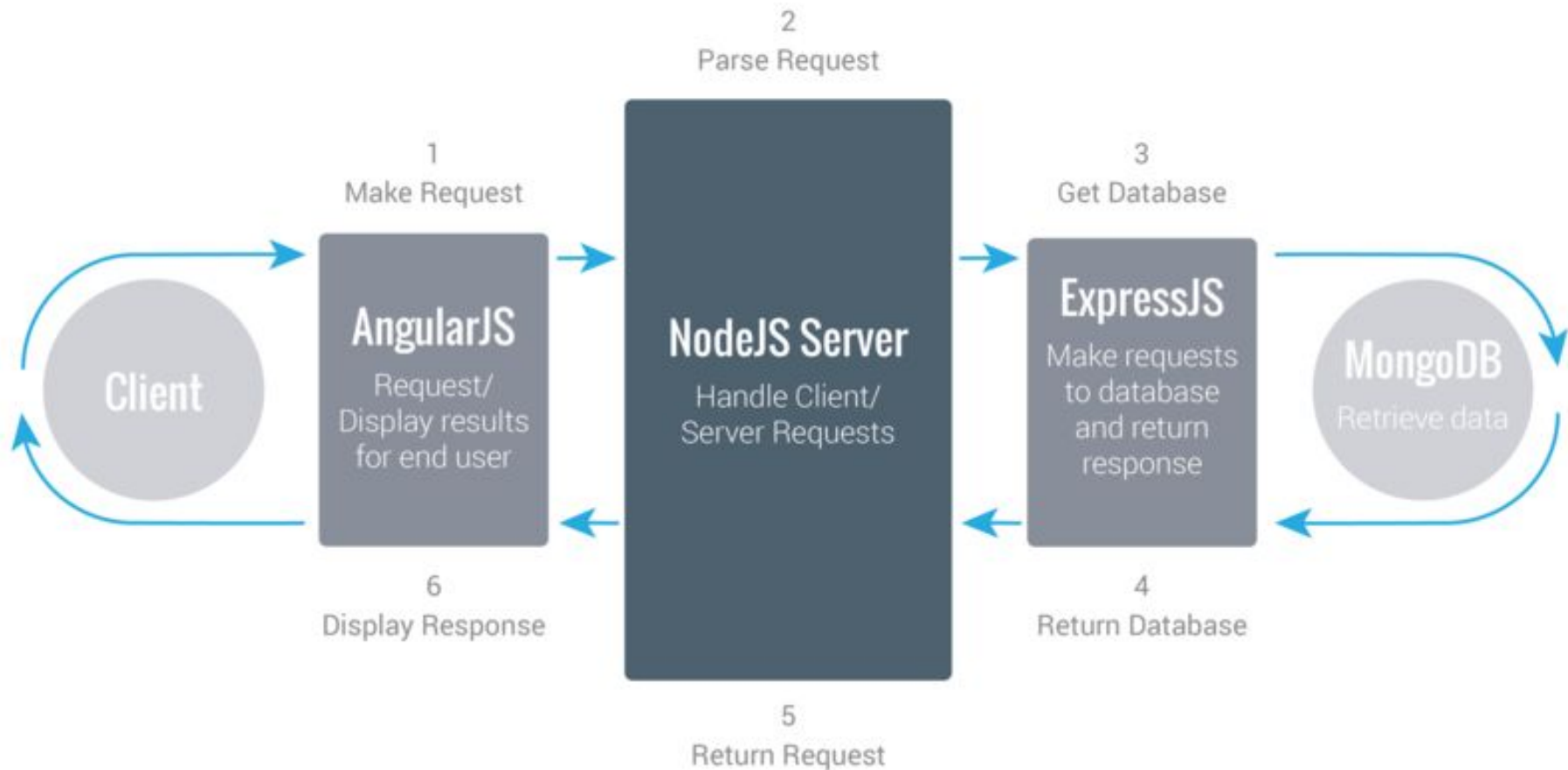




Development: Software framework

- ❖ Front-end and back-end JavaScript
- ❖ MEAN Stack
 - MongoDB (Database)
 - ExpressJS (Server)
 - AngularJS (Client)
 - NodeJS (Server-side JS)





Source: [What Developers Mean When They Build a MEAN Stack - New Spin Digital](#)



Development: Design pattern

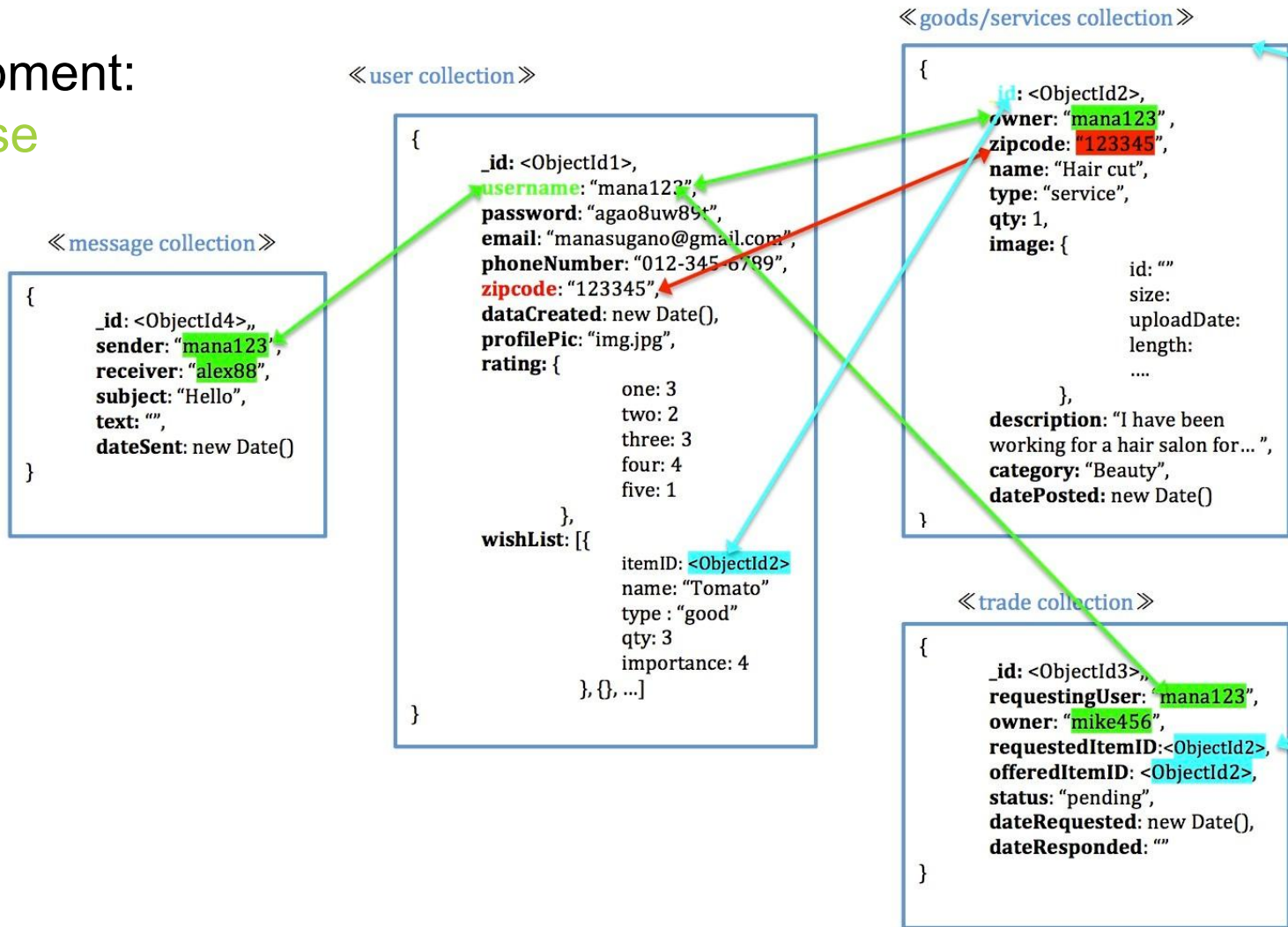
- ❖ Model-View-Controller (MVC) for modularity
 - The model
 - MongoDB
 - The view
 - HTML, AngularJS, EJS
 - The controller
 - ExpressJS, AngularJS
 - Control data flow between view and model



Development: Database design

- ❖ MongoDB
 - A back-end, no SQL database
 - Uses JSON-like documents as opposed to tables (called “collections” here)
 - Each field in a document has corresponding key/value pairs

Development: Database design





Development: Challenges and Solutions

- ❖ Learning a new framework
- ❖ Implementing sessions
- ❖ Designing
- ❖ Coordinating with team members





Demo





Future Enhancements

- ❖ Features to completely implement:
 - Messaging
 - User feedback score
 - Rate your trades with other users
 - Show trade history
 - Show recent activity on profile
 - Check for inappropriate content
 - Text
 - Images



Questions? Comments?

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