

**tradingpost**



## A Bartering System Web Application

Version 1.0

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# Presentation Overview

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





# Overview: Background

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





## Overview: Motivation

❖ Why do we need it?



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



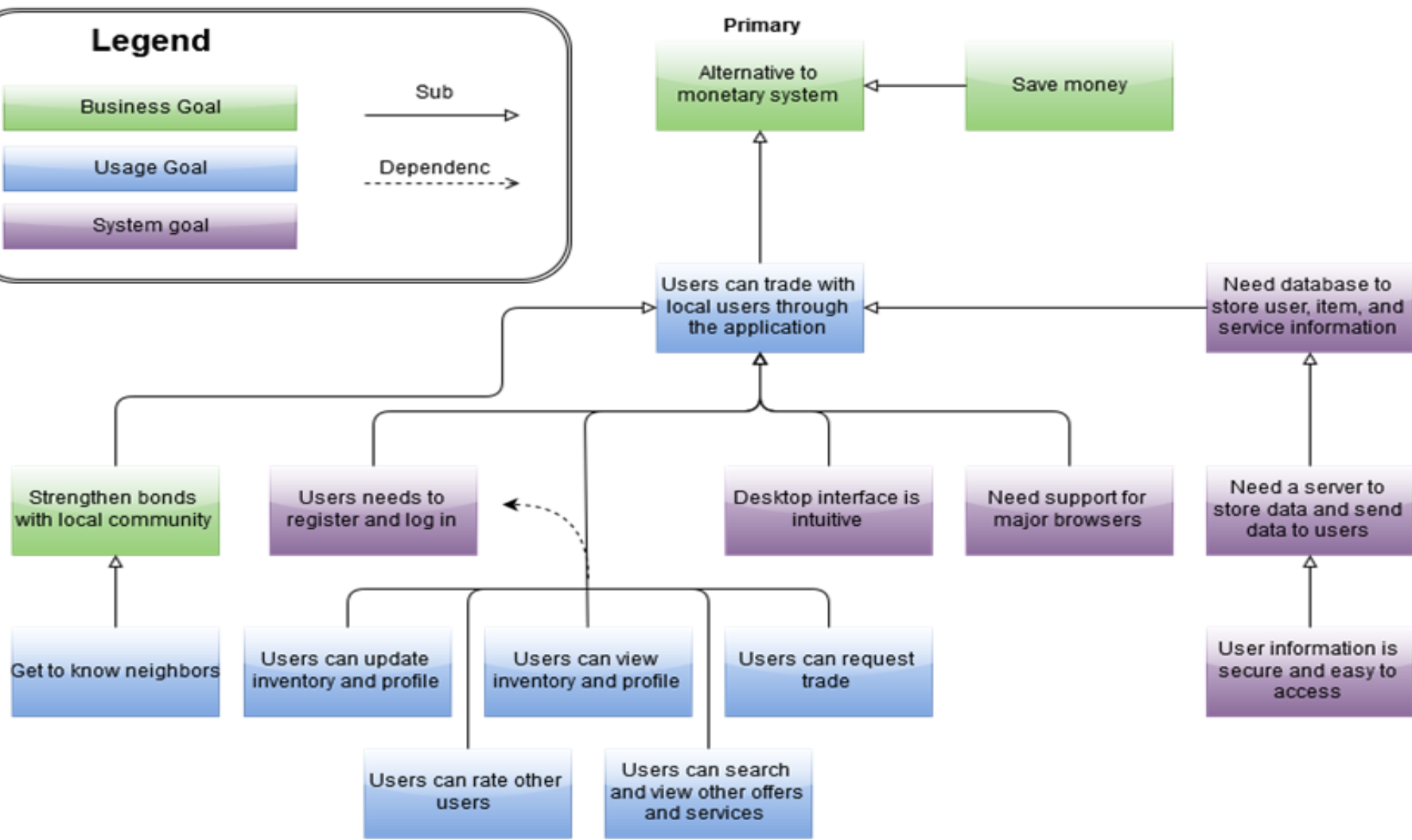
- ◆ Increase communication in local communities



## 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





## 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

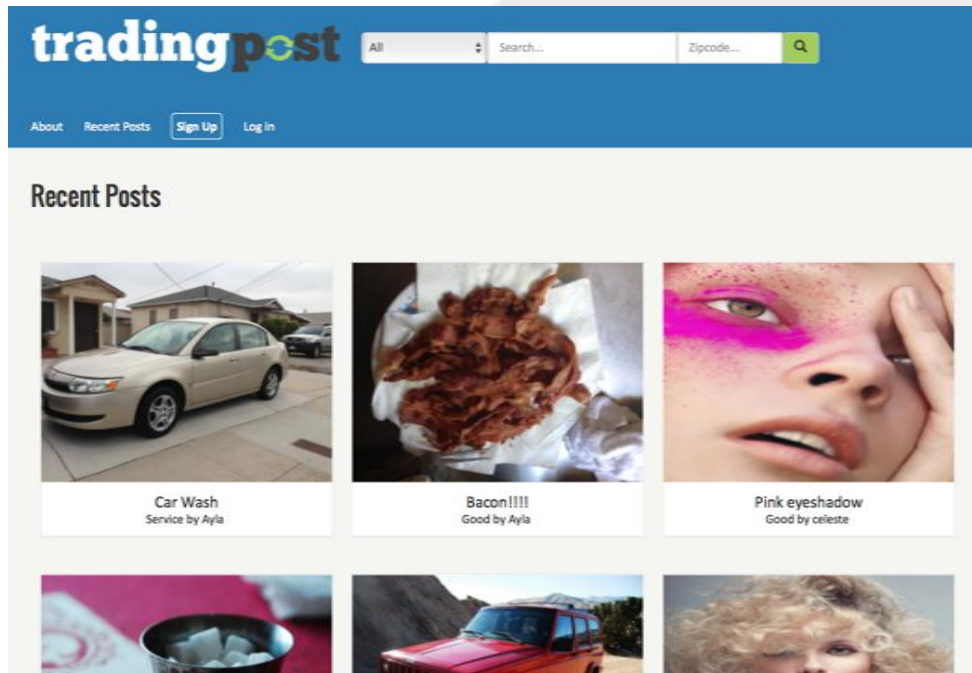






# Development: Visual Design

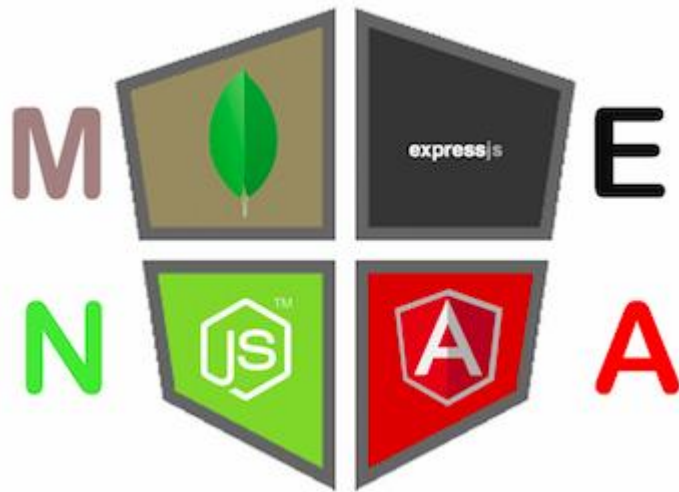
- ❖ Name origin
- ❖ Logo design
- ❖ Color scheme
- ❖ Layout overview
- ❖ Tools used

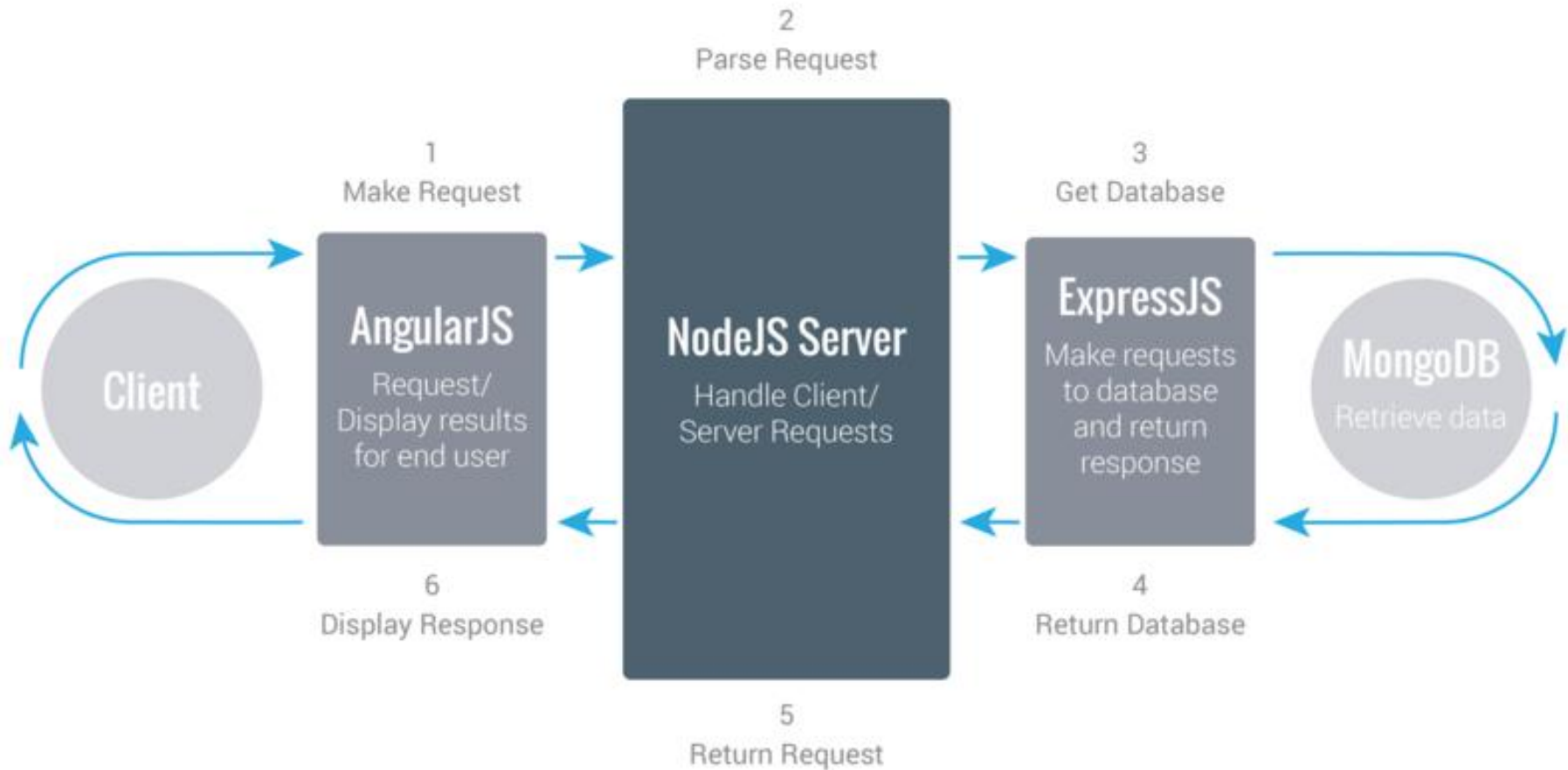




## Development: Software framework

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





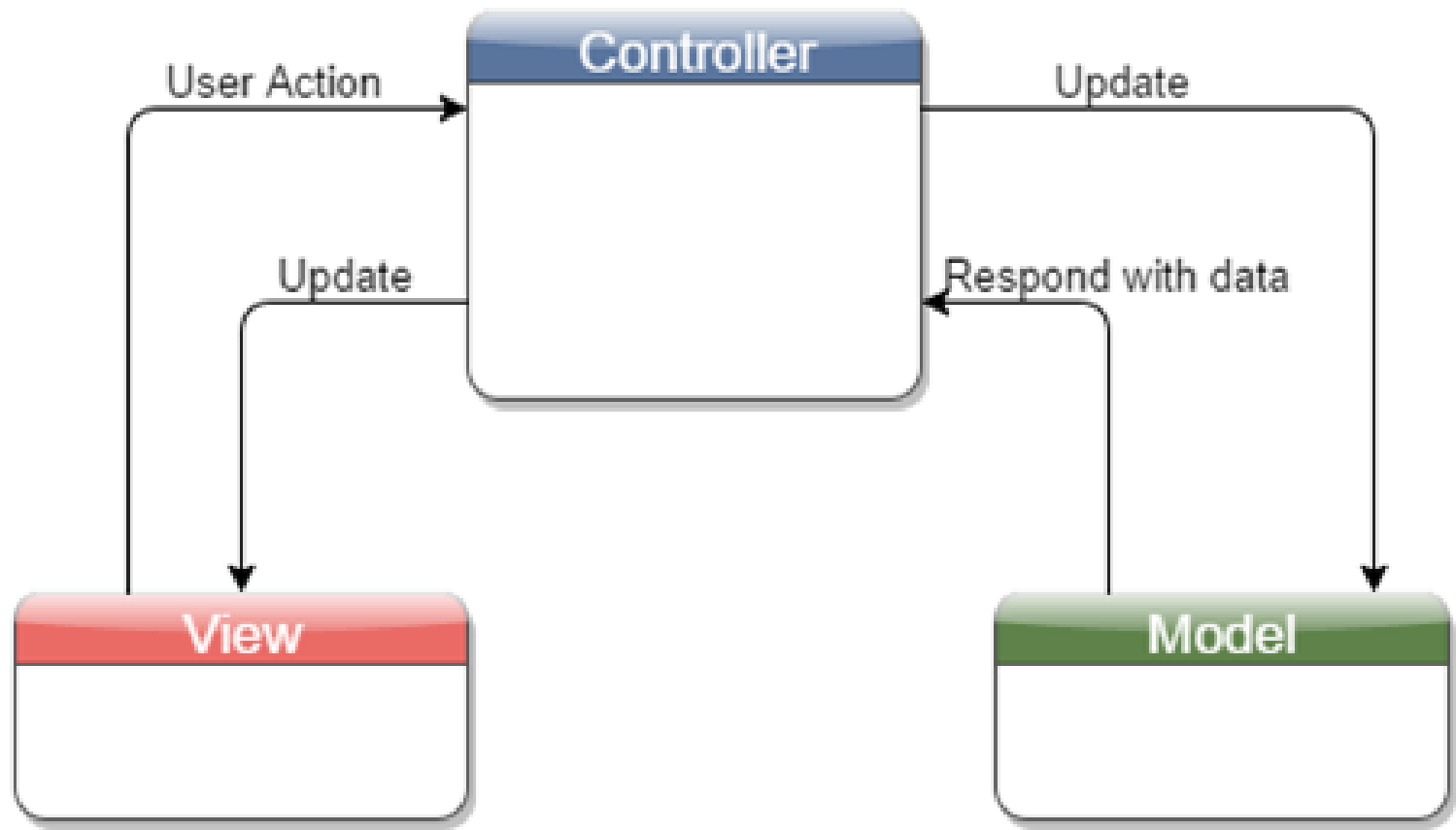
Source: [What Developers Mean When They Build a MEAN Stack - New Spin Digital](#)



## Development: Design pattern

- ❖ Model-View-Controller (MVC) for modularity
  - The model
    - MongoDB
  - The view
    - HTML, AngularJS, EJS
  - The controller





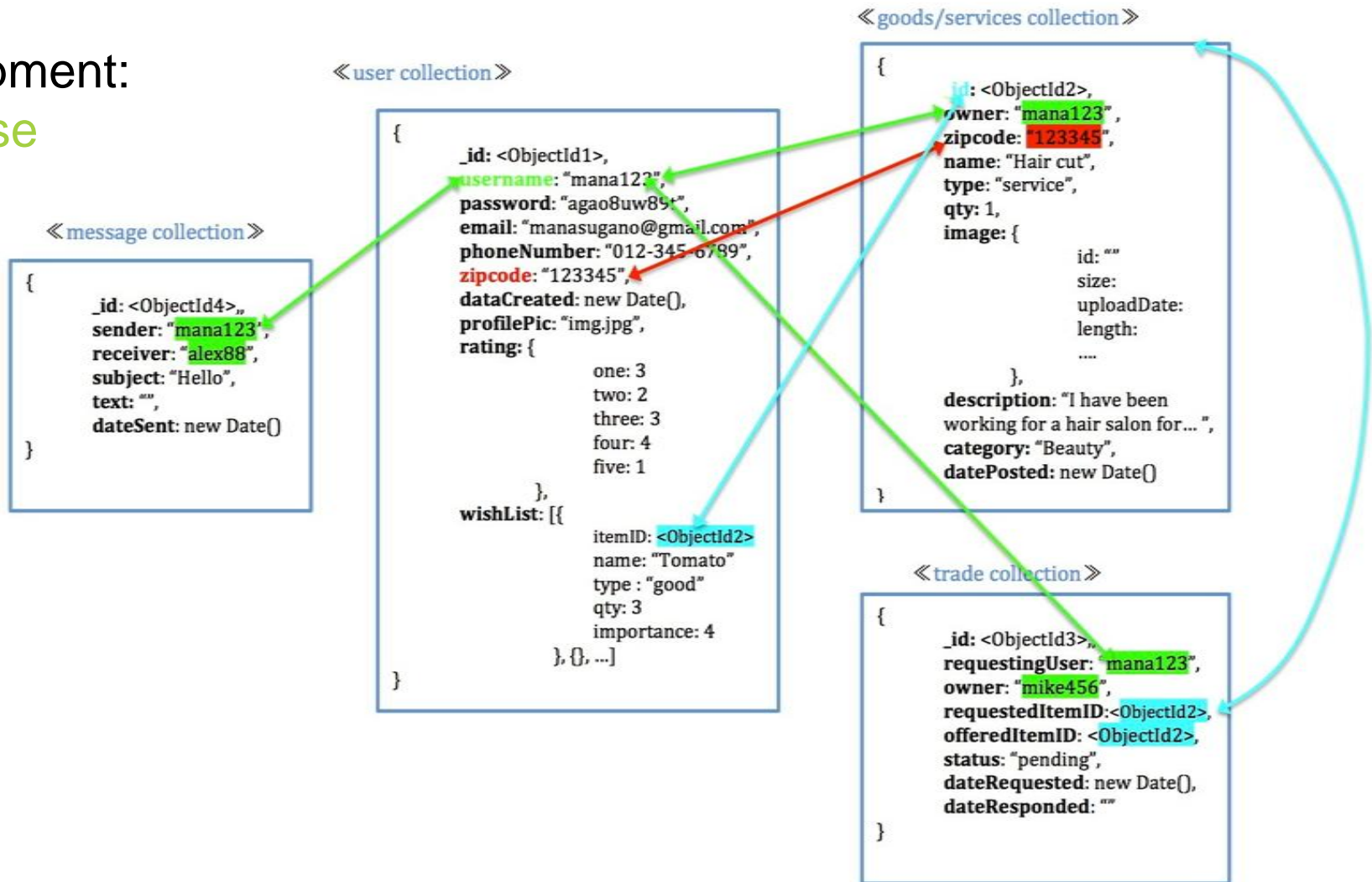


## Development: Database design

### ❖ 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









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



Questions? Comments?

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