GROUP H

Team members:

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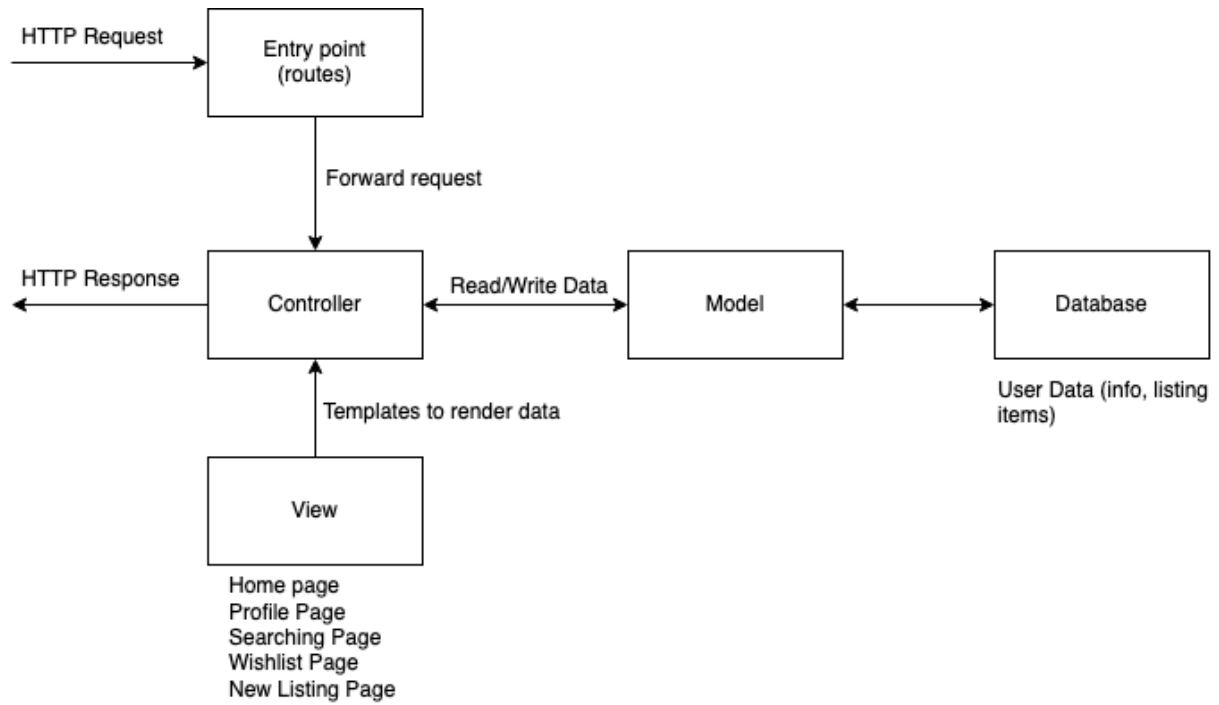
Github link:

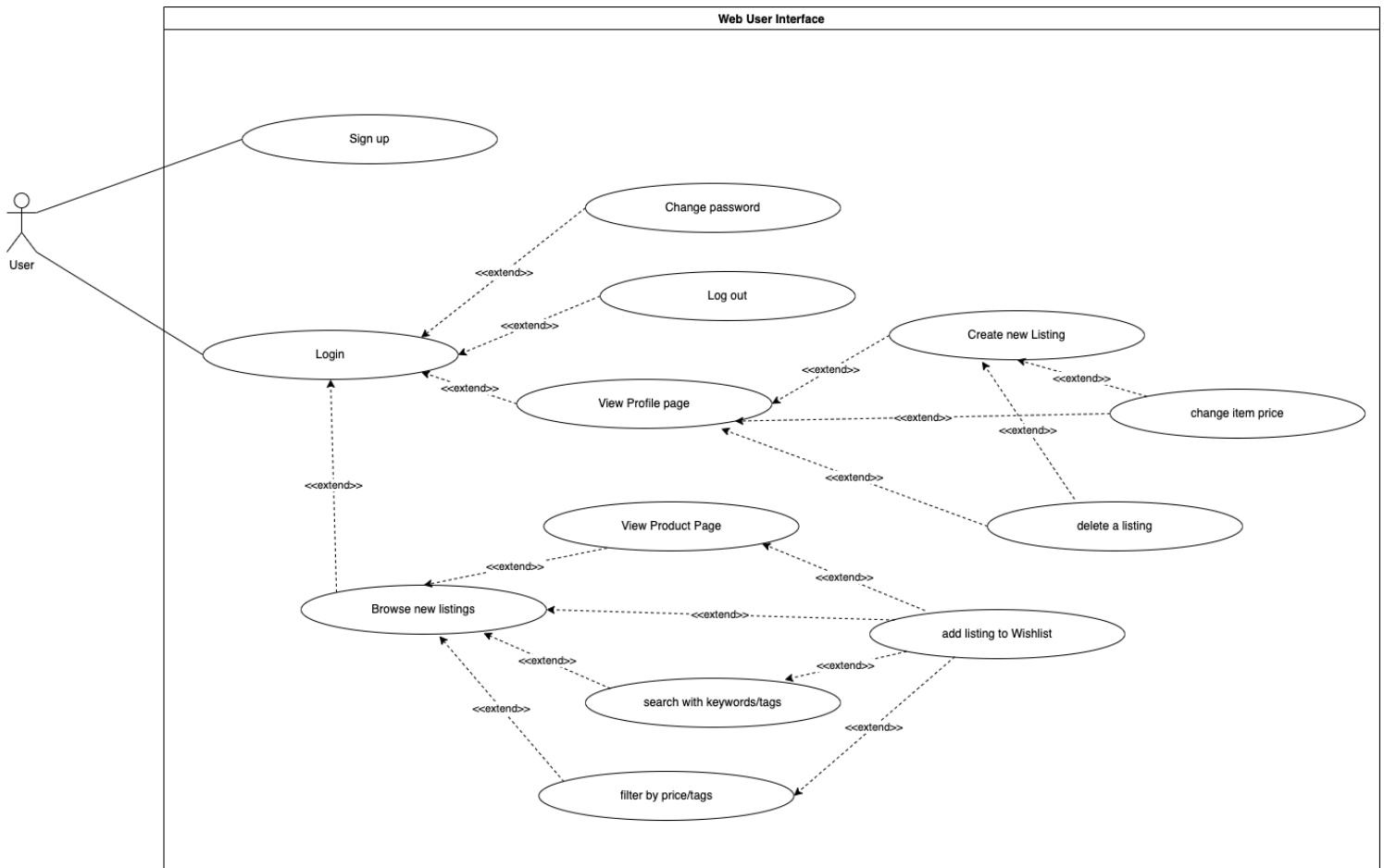https://github.com/trungnguyen10/CSC4330ProjectGroupH

Members' contribution:

- Trung Nguyen: System Architecture, Use Case diagrams, Skeleton Codes, Database Schema
- Justin Nguyen: Features Description
- Andres Oberhelman: Design Documents, Database Schema
- Blake Opial: Features Description
- Devin Pardo: Features Description

System Architecture

HTTP Request → Entry point (routes)

Forward request

HTTP Response ← Controller ←→ Read/Write Data ←→ Model ←→ Database

Templates to render data

View

Home page
Profile Page
Searching Page
Wishlist Page
New Listing Page

User Data (info, listing items)

Use Cases

User

Sign up

Change password

<<extend>>

Log out

<<extend>>

Login

<<extend>>

View Profile page

Create new Listing

<<extend>>

change item price

<<extend>>

<<extend>>

<<extend>>

delete a listing

<<extend>>

<<extend>>

View Product Page

<<extend>>

<<extend>>

Browse new listings

<<extend>>

add listing to Wishlist

<<extend>>

<<extend>>

search with keywords/tags

<<extend>>

<<extend>>

filter by price/tags

<<extend>>

Feature Description

Homepage

Description
1. As a registered user, I want to be able to see recently posted listings for sale after I log in. Every listing needs to have a title, an image, and a price.
2. As a registered user, from the homepage, I want to browse as many listings as I want by browsing page by page.
3. As a registered user, I want to be able to make a search within the home page. I want to be able to use one or more words to search for items which I want. Those words can be either the title of the listing or the tag of the listing. From the results, I want to be able to filter the result by different categories such as price, date listed, tags
4. As a registered user, I want to be able to filter the listings in the home page by price

Constraints: The Homepage must efficiently load multiple item listings at once. Allow for easy searching through filtering or text searching.

Comments: Based on Group H's scenarios.

Sign Up

Description
1. As a student, I want to be able to sign up for the system using my student email and a password so that I can buy and sell items in the system with other students in the university
2. A new user enters the website for the first time unaware of what the website is like, but aware of the services provided. They browse the front screen and see a highlighted button in the corner prompting them to sign up. After clicking the signup button the user fills out the form for signing up.
3. As a student, I want to sign up to use ColumbusList with a verified school email and password.

Constraints: The user must sign up for the website through the homepage, and must present a valid school email address.

Comments: Based on Group H's scenarios.

Login

Description

1. As a registered user, I want to be able to login to the system using my student email and my password.
2. Kenedy wants to login into her student profile on the market place. She enters the website and puts in her email and password in the designated slots and logins.
3. Login: On this website, there are multiple ways to login to an account. The first way is on the front page of the website. There is a login button on the top right next to the signup button. The user wants to use a service, already has an account but has forgotten to login. When trying to access the service, they are redirected to a login page.
4. As a student, I would like to sign in with my username or email and password.

Constraints: Access must be restricted to users with a verified school email address or username that is saved in the User Database.

Comments: Based on Group H's scenarios.

Profile Page

Description

1. As a registered user, I want to be able to access to my profile page where I can find my information, and my listings
2. As a registered user who is selling items on the system, I want to be able to edit the price of a listing from my profile page.
3. As a registered user who is selling items on the system, I want to be able to remove a listing from my profile page when the listing is sold or no longer available
4. As a user selling an item, I'd like to be able to give my listing specific tags to be found easier from the search feature.
5. As a user selling an item, I'd like to be able to adjust the price of my listings from my account page at any time.
6. As a registered user who is selling items on the system, I want to be able to remove a listing from my profile page when the listing is sold or no longer available
7. If the user wants to receive a notification of when an item changes price, they can select an option on the item page "notify me when the price changes." If the user has an account an email will be sent to the email tied to the account. If the user has no account, they receive a prompt to sign up.

8. As a registered user, whenever the price of a listing which is in my wishlist changes, I want to be notified of this change. This notification should be an alert so it can catch my attention.

Constraints: Changes like item's price must be reflected in the database in a short amount of time then notify users who added that item in their wishlist. Adding/deleting listings must be reflected on the page.

Comments: Based on Group H's scenarios.
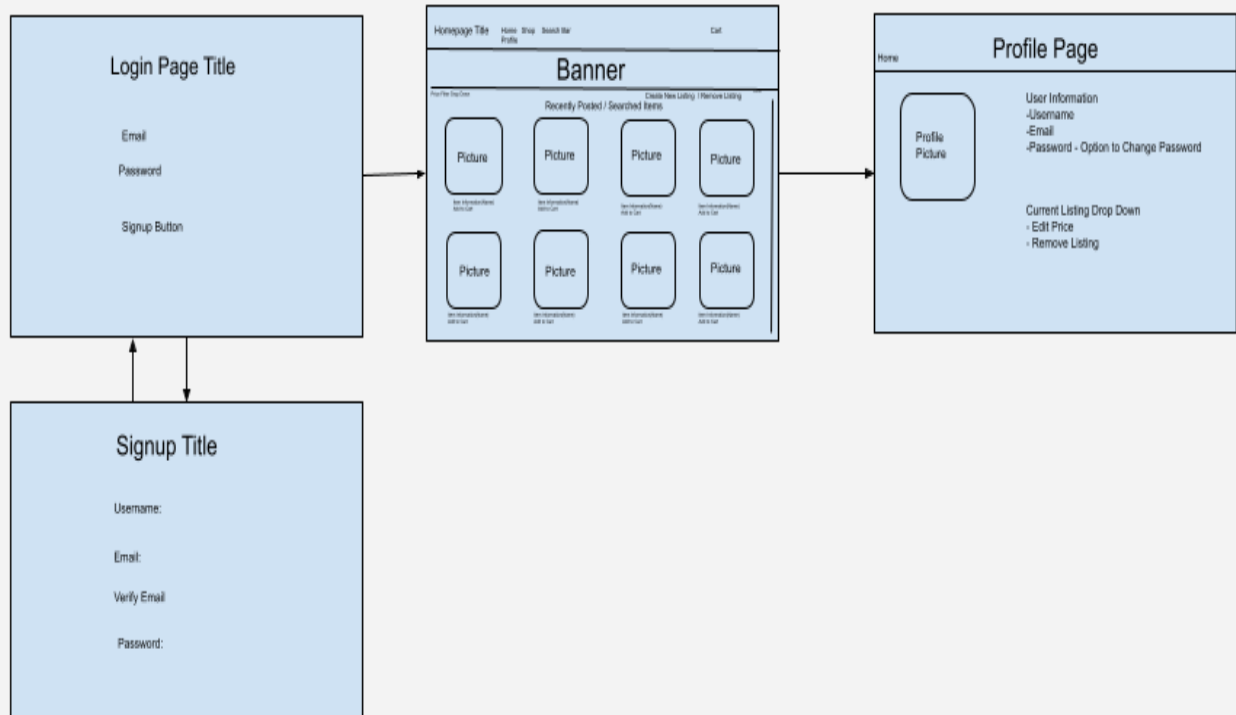
Item Page

Description
1. As a registered user, whenever I see a listing whether in the home page, or search result, I want to be able to add that listing to my wishlist so that I can check it back any time when I decide to buy it.
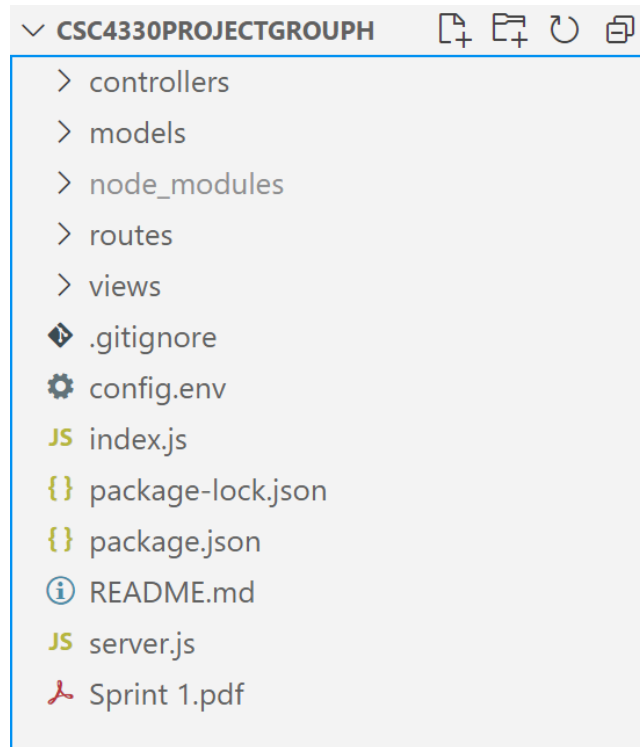
Constraints: Only the owner of the listing may edit its details. Potential buyers may save the listing to a wishlist for a later date.

Comments: Based on Group H's scenarios.

Design Document

Login Page Title

Email

Password

Signup Button

Signup Title

Username:

Email:

Verify Email

Password:

Banner

Homepage Title   Home Shop Search Bar   Cart
Profile

Create New Listing | Remove Listing

Recently Posted / Searched Items

Picture   Picture   Picture   Picture

Picture   Picture   Picture   Picture

Profile Page

Home

User Information
-Username
-Email
-Password - Option to Change Password

Profile
Picture

Current Listing Drop Down
> Edit Price
> Remove Listing

Skeleton Codes

CSC4330PROJECTGROUPH

- controllers
- models
- node_modules
- routes
- views
- .gitignore
- config.env
- index.js
- package-lock.json
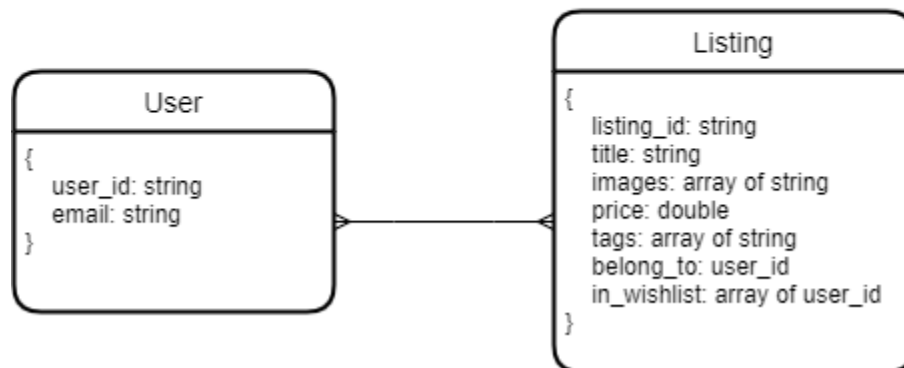- package.json
- README.md
- server.js
- Sprint 1.pdf

- Setup git environment for the project
- Setup the development environment for the project
- Setup the MVC structure for the project
- Setup basic HTTP request routings for the project
- Create and connect database server to the project

Github link: https://github.com/trungnguyen10/CSC4330ProjectGroupH

Database Schema

**ColumbusList
Database Schema**

We use MongoDB as a database management system for our website. MongoDB is a NoSQL database program where data is stored in collections and documents. Each collection contains documents. Each document is an instance of the object and is described in JSON-like syntax. In the application, an user is uniquely identified by a `user_id`; a listing is uniquely identified by a `listing_id`.

The relationship between users and listings is a many-to-many relationship.

- An user can own 0 or more listings. An user can have 0 or more listings in his wishlist.
- A listing can only belong to 1 user. A listing can be in the wishlist of 0 or more users.

The relationship between users and listings is reflected in `belong_to` and `in_wishlist` properties of the listing object.

Product Backlog (Updated)

Requirements Specification Document

Home Page/Item Catalog

- Recently posted items from item database
- Browse items by scrolling
- Search item by title
- Search item by tag
- Filter item by price
- Link to Create New Listing page
- Link to Profile page

Sign Up

- Email verification
- Sign up form

Login Page

- Verify Email/Password
- Pull information from User Database
- Redirect to Home Page

Profile Page

- User information
- Change password
- User's current listings
- Edit price of posted listing
- Remove a listing

Item Page

- Picture gallery of the item
- Basic information (Price, Owner of the object)
- Tags
- Add to Wishlist button
- Add to cart

Item Database

- Name of Product
- Price
- Owner information
- Associated Tags

User Database

- Email (***@colombus.edu)
- Password
- User created Listings

Refactoring code to improve understandability and performance

Sprint Backlog

Requirements Specification Document
- Features Description
  - Homepage
  - Sign up
  - Login
  - Profile Page
  - ListingPage

System Architecture

Use Cases

Design Documents

Skeleton codes for the project on Github

Database Schema