UTSC HUB
System Design Document

Andrew Qian
Henry Zhuo
John Yuan
Muntaqa Mahmood
Nandhakishore Krishnamurthy Shanthi
Shence Yang
Shun Murai

Table of Contents

Frontend CRC Cards

Login Page	
Parent: none Subclass: Signup Page	
Responsibilities: ● Allow users who are registered to go to their profile page to see their posts and events. ● Users who are unregistered can go to the signup page to sign up for an account.	Collaborators: ● Signup Page ● Profile Page

Signup Page	
Parent: Login Page Subclass: none	
Responsibilities: ● Allow unregistered users to sign up for a new account using their UofT email so they can make posts and events.	Collaborators: ● Login Page

Profile Page

Parent: Login Page
Subclass: Navigation Bar

Responsibilities:	Collaborators:
● Logged-in users can see their profile information and all the posts they made about events and items they want to sell or buy.	● Login Page ● Navigation Bar

Navigation Bar

Parent: Profile Page
Subclass: none

Responsibilities:	Collaborators:
● Logged-in users can go to different pages by clicking on the subtext in the bar	● Profile Page ● About Page ● Market Page ● Event Page ● Message Page

Event Page	
Parent: Profile Page Subclass: Navigation Bar	
Responsibilities: • Logged-in users can see the events that have been posted.	Collaborators: • Post Event Page • Event Details Page • Navigation Bar

Post Event Page	
Parent: Event Page Subclass: Navigation Bar	
Responsibilities: • Logged-in users can post their own events and the created events can be found in Event Page	Collaborators: • Event Page • Navigation Bar

Event Details Page	
Parent: Event Page Subclass: Navigation Bar	
Responsibilities: ● Logged-in users can see the details of the event (description) by clicking the square box in the Event Page	Collaborators: ● Event Page ● Navigation Bar

Market Page	
Parent: Profile Page Subclass: Navigation Bar	
Responsibilities: ● Logged-in users can see the items that have been posted.	Collaborators: ● Post Item Page ● Item Details Page ● Navigation Bar

Post Item Page
Parent: Market Page Subclass: Navigation Bar

Responsibilities:	Collaborators:
● Logged-in users can post their own product in the market and users can see the products in the market page	● Market Page ● Navigation Bar

Market Details Page
Parent: Market Page Subclass: Navigation Bar

Responsibilities:	Collaborators:
● Logged-in users can see the details of the items by clicking the square box in the Market Page	● Market Page ● Navigation Bar ● Comment Section

Comment Section	
Parent: Market Page Subclass: Navigation Bar	
Responsibilities: ● Logged-in users can see the comments of the product and post their comments	Collaborators: ● Market Page ● Market Details Page ● Navigation Bar

Cart Page	
Parent: Login Page Subclass: Navigation Bar	
Responsibilities: ● Logged-in users can see the items they added to cart when shopping in the market page	Collaborators: ● Login Page ● Navigation Bar

My order Page	
Parent: Profile Page Subclass: Navigation Bar	
Responsibilities: ● Logged-in users can see the items they bought	Collaborators: ● Profile Page ● Navigation Bar

Backend CRC Cards

User
Parent/Subclass: None

Responsibilities:	Collaborators:
● Provides model/schema for users for the app	● MongoDB database ● Event ● Item

Event
Parent/Subclass: None

Responsibilities:	Collaborators:
● Provides model/schema for events created by users for the app	● MongoDB database ● User

Item
Parent/Subclass: None

Responsibilities:	Collaborators:
● Provides model/schema for marketplace items created by users for the app	● MongoDB database ● User

Comment	
Parent/Subclass: None	
Responsibilities: ● Provides model/schema for comments created by users for the marketplace items.	Collaborators: ● MongoDB database ● Item ● User

API and their Endpoints:

Backend API	
Parent/Subclass: none	
Responsibilities: ● Handles all endpoints for authentication, log in, register	Collaborators: ● Server ● Router (auth.js, users.js, events.js, etc)

Router	
Responsibilities: ● Route configs are responsible for initializing and associating routes with controllers.	Collaborators: ● Client ● MongoDB database ● Server

Handling HTTP Requests and Responses.	

Events Routing	
Parent/Subclass: None	
Responsibilities: - Route configs are responsible for initializing and associating routes with controllers. - Handling HTTP Requests and Responses.	Collaborators: - MongoDB database - User Schema Model - Event Schema Model

Items Routing	
Parent/Subclass: None	
Responsibilities: - Route configs are responsible for initializing and associating routes with controllers. - Handling HTTP Requests and Responses relating to marketplace items	Collaborators: - MongoDB database - User Schema Model - Event Schema Model

Cart Routing
Parent/Subclass: None

Responsibilities:	Collaborators:
● Route configs are responsible for initializing and associating routes with controllers. ● Handling HTTP Requests and Responses relating to marketplace items and reserving them for the User to place an order.	● MongoDB database ● User Schema Model ● Item Schema Model

Comments Routing
Parent/Subclass: None

Responsibilities:	Collaborators:
● Route configs are responsible for initializing and associating routes with controllers. ● Handling HTTP Requests and Responses relating to comments made on items and for other users to view your comments as feedback while buying/viewing an item.	● MongoDB database ● User Schema Model ● Item Schema Model

Software Architecture Diagram: MVC

MODEL

MongoDB Database

User

View

Frontend Router

React Components (JSX, CSS)

Controller (Routes)

Routes

Models

Backend Service (API Server)

HTTP Requests

Frontend methods for making requests to backend

User input

Updates