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## Environment Checklist

- ☒ ~~GitHub – Shared software version control/documents repository~~  
<https://github.com/Software-Engineering-I-Group/CS-GY-6063-project>
- ☒ ~~Slack – Team communications (chat rooms) established~~  
<https://softwareengin-sn67630.slack.com>

## Team Project Ideas

### 1. Textbook Exchange

**Deliverable Format:** Website

**Purpose:** Provide a platform for college students to trade, sell, and rent textbooks

**Motivation:**

- Textbooks can be expensive and are rarely needed after a course ends
- Students normally use FB groups to trade/sell/rent textbooks
- No dedicated platform to easily browse available textbooks in one's college

**Scope/Features:**

General

- Sign up: will need college emails to associate student with a college space
- Profiles: will display history of transactions (to build trust) and current books on rent
- Payment: need to store card details to enable payments through the website / alternatively, payments can be handled outside of the platform to avoid taxes and transaction fees
- Private message and notifications: self-explanatory
- Search: search users and textbooks available in one's college space

Sellers

- Post: can post books for sale/rent with price; will need to associate book with a course and state its condition for buyers to easily find and compare; other details: images, editions, ISBN number
- See and decline/accept request from buyers for particular textbooks

Buyers/Renters

- Browse textbooks by course
- Filter textbooks by price, condition, and other factors
- Send requests for rent/sale
- Star/Save textbooks for future

## 2. Dog Walking

**Deliverable Format:** Web application

**Purpose:** To better connect dog owners and walkers in NYC

**Motivation:**

- Stronger community
- Owners - Find secure and reliable dog walk
- Walkers - Get more opportunities to provide service

**Scope/Features:**

Owners

- Search: Find nearby walkers
- Reserve: Book a dog walk by assigning distance/route/time etc.
- Message & Notification: Chat with walkers and get notified (email) for new message
- History: Check current/completed walks with precise GPS tracking information
- Profile: Upload/edit profile and view rating collected from walkers

Walkers

- Schedule: View and manage weekly/upcoming dog walk schedule
- Dog-walk Mode: Start/end a scheduled dog walk and record its route
- Message & Notification: Chat with owners and get notified (email) for new message/reservation
- History: View a dashboard of completed walks/earnings/distance/time etc.
- Profile: Upload/edit profile and view reviews collected from owners

## 3. Stock Price News

**Deliverable Format:** Website

**Purpose:** Provide a one-stop platform to help users to collect information and make better decisions for stock trading

**Motivation:**

- Users can make timely decisions with the help of real-time updates
- Users can easily track investments and portfolio performance at one place

**Scope/Features:**

General:

- Search: Search company/market information
- Watchlist: Add or remove a company in watchlist
- Portfolio: View current account value/potential benefit value etc.

Stock/Company:

- Newsfeed: Scrapes related news and provides latest headlines/keywords
- Earnings: Shows earnings calendar of historical and coming earnings release
- Charts: Shows historical price information in time series graph

Markets:

- Newsfeed: Scrapes market news and provides latest headlines/keywords
- Charts: Shows market summary of major indices such as Nasdaq/Dow/S&P etc.

- Leaderboard: Lists top 10 most active (with largest change %) companies in a market