`Made in Thailand` p01 Design Document

TARGET SHIP DATE: {2024-12-13}
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Stock Visualizer Platform - XÆA-69
(X Ash A Sixty-Nine)

Overview

We are making a website that allows users to view real-time information about any stocks the user wants to see. Similar to the stocks app, users can create a list of stocks of their choosing by searching for specific stocks and favoriting them. We will also allow users to organize displayed stocks by topics, such as stocks that have increased/decreased the most during that day, industry-specific stocks, and countries.
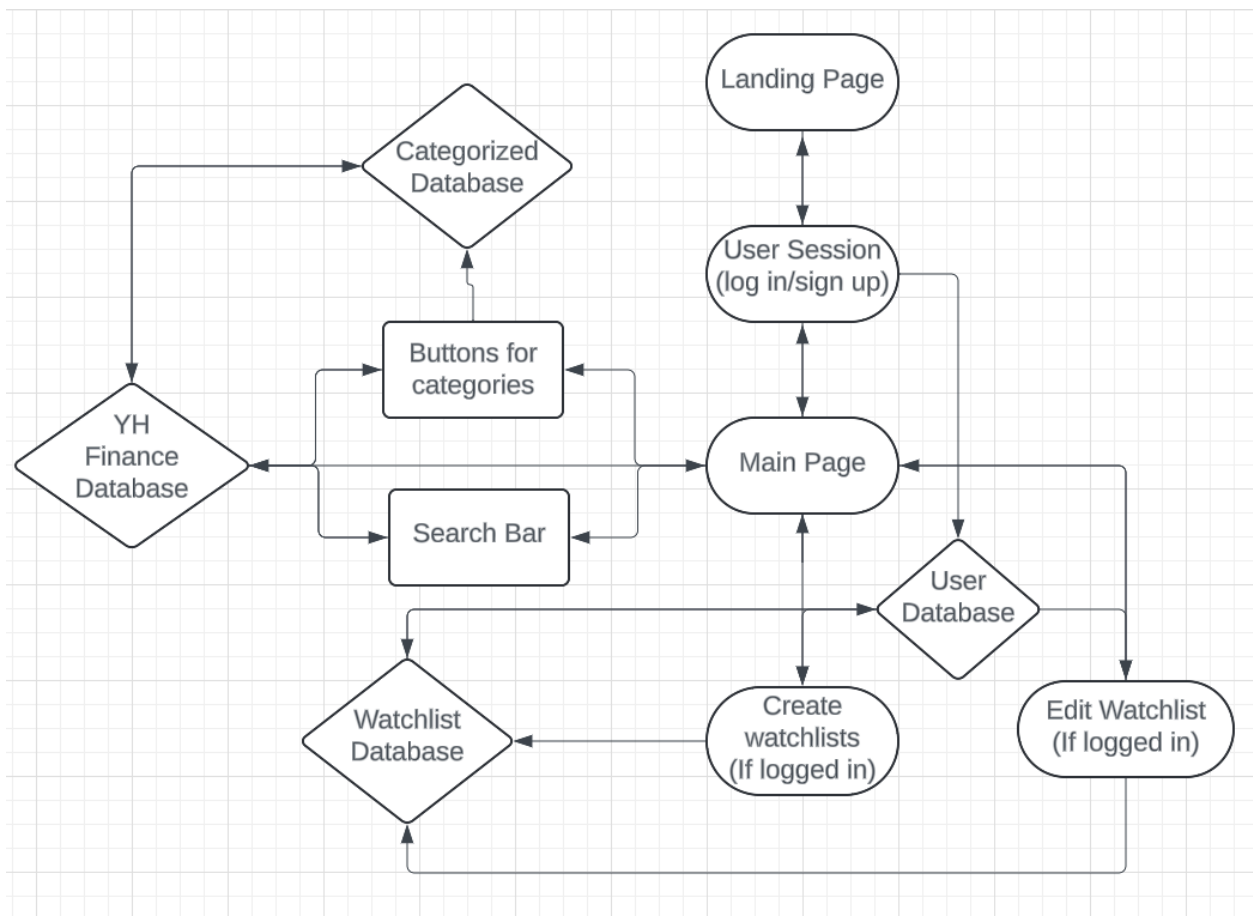

Components

- User accounts
    - Be able to create new accounts
    - login/logout and keep user sessions
    - User account info is stored within database
- Main route that allows users to view and search all the stocks
- Users can create new watchlists for the stocks they want to track.
    - Be able to remove and add any stock of choosing
- Route to these watchlists
- Search tool that allows users to search for specific stocks
- Different routes for buttons that sort stocks
    - Most increased stocks
        - By price
        - By percentage
    - Most decreased stocks
        - By price
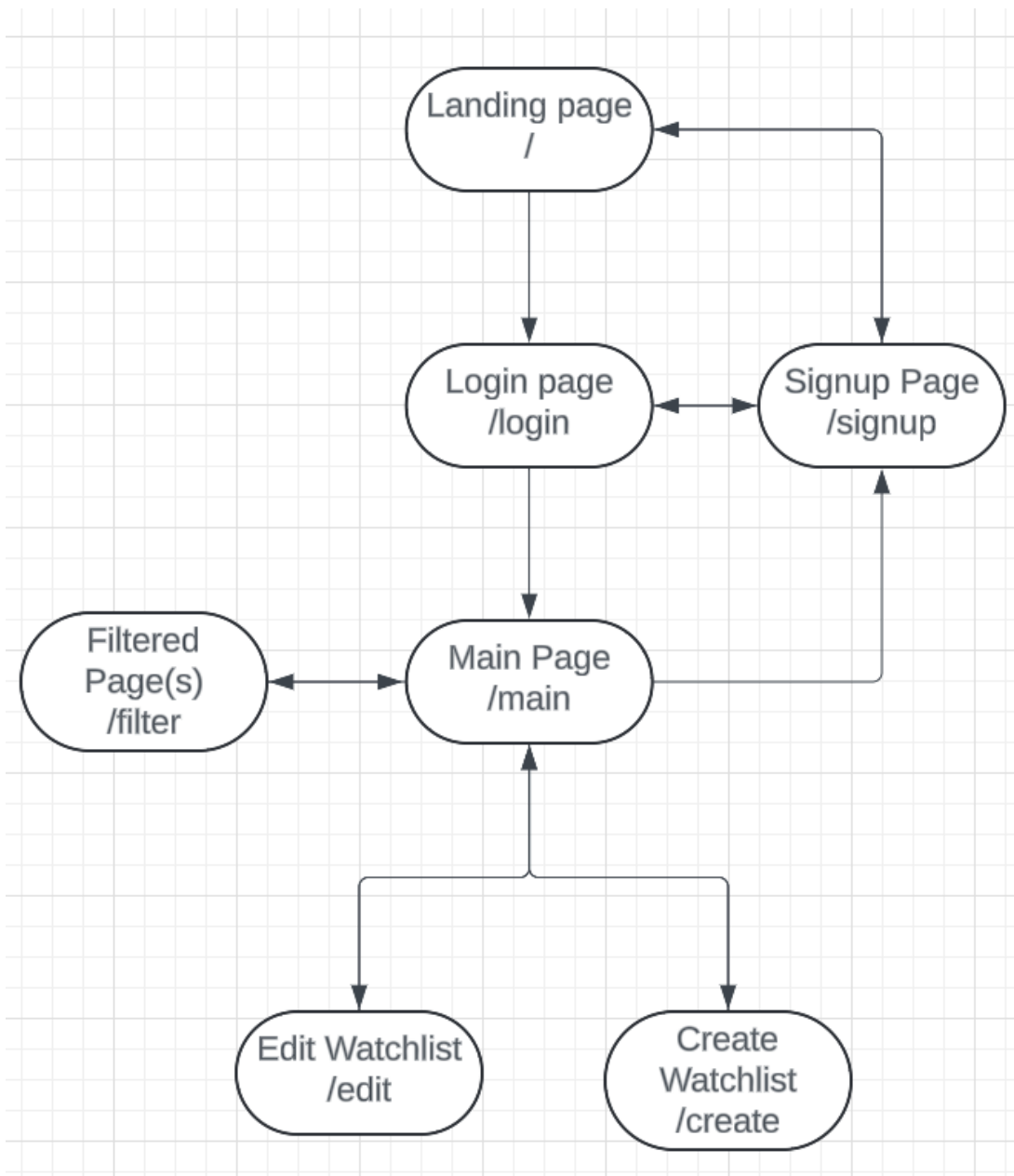   - By percentage

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Component Relationships

- User must be logged in to create watchlists
- Route to a landing page where the user can sign up/log in
- Once logged in, user is on a homepage for all stocks
    - Search function
    - Ability to add stocks to watch lists with one click
- Route to user's watchlists
- Route to sorted lists of stocks

Component Relationships Visualization

Site Map

Database (xaea69.db)

Tables

<u>users</u>:

id	username	password	email
#	TEXT	PYBYTE	TEXT

Filtered pages:

id	name	filter
#	TEXT	TEXT

watchlists:

user_id	tickers
REFERENCES users(id)	list(TEXT)

API'S
- YH(Yahoo)Finance
    - This API provides access to information about finance and about stocks, providing real time market data, historical stock prices, etc.
    - We will utilize this API to provide the data that will be displayed within XÆA-69.
- MarketStack
    - This API allows access to real time and historical worldwide stock market data.
    - We will utilize this API to provide additional data for XÆA-69.
- Calendarific
    - This API provides worldwide holidays and the dates for them.
    - We may use this API to help the user identify different holidays and allow them to take into consideration holidays when observing stocks.
- Deck of Cards
    - This API allows you to create a virtual deck of cards.
    - We may use this feature to help create profiles of stocks that users have put into their favorite list, making the viewing experience cooler.

Front-end Framework: Tailwind
 - Utilize tailwind for buttons in user interface, toggle between light and dark mode, page sections, and prebuilt page designs.
 - This will ensure consistent design.

TASK ASSIGNMENTS

TASK	Wen Zhang	Daniel Park	Danny Huang	Sasha (Alex) Murokh
Setting up Python, SQLite3, and Tailwind environments.			X	X
User Authentication	X	X		
Watchlists			X	X
Functions/Search Bar	X	X		
Front-end (HTML)	X	X		
Front-end (CSS + Tailwind)			X	X
DB Lead		X		
Final Testing and Bug Fixing	X	X	X	X