# Made in Thailand p01 Design Document

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Wen Zhang, Daniel Park, Danny Huang, Sasha (Alex) Murokh

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 adding specific stocks. We will also allow users to organize displayed stocks by topics, such as stocks that have increased/decreased the most during that day, high-volume stocks, and tech stocks.

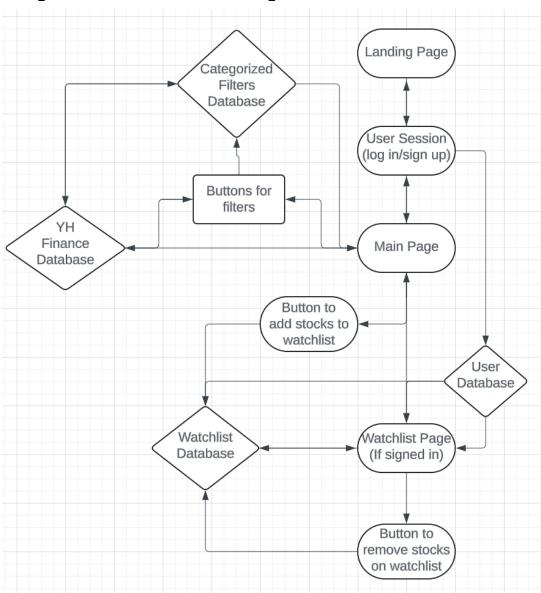
#### Components

- 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 add stocks to their watchlist for the stocks they want to track.
  - Be able to remove and add any stock of choosing
- Route to these watchlists
- Buttons that filter stocks:
  - ALL: Displays all stocks
  - GAIN: Displays stocks that gained value
  - LOST: Displays stocks that lost value
  - ACTIVE: Displays most active stocks
  - TECH: Technology stocks with the most revenue

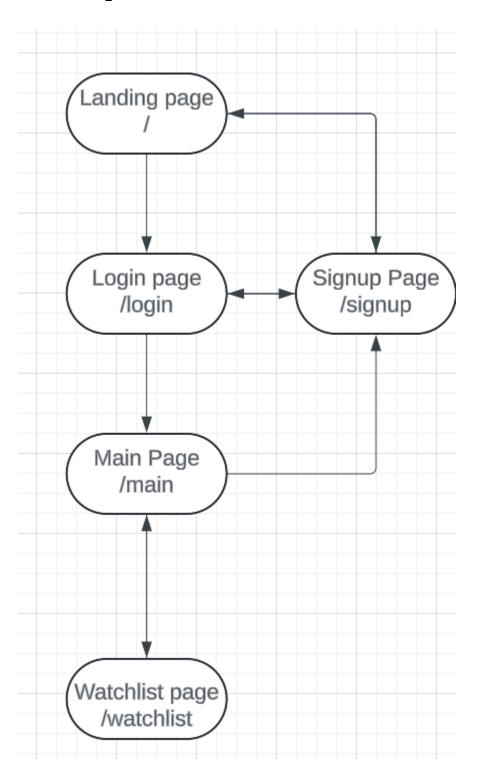
## Component Relationships

- User must be logged in to add to their 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
  - Buttons to filter stocks
  - Ability to add stocks to watch lists with one click
- Route to user's watchlists

## Component Relationships Visualization



## Site Map



## Database (xaea69.db)

Tables

#### <u>users</u>:

id	username	password
#	TEXT	PYBYTE

#### tickers:

ticker	name	last_sale	net_change
TEXT	TEXT	TEXT	TEXT

#### <u>filters</u>:

id	name	filter
#	TEXT	TEXT

## watchlists:

username	ticker	name	last_sale	net_change
TEXT	TEXT	TEXT	TEXT	TEXT

username REFERENCES users(username)

## holidays:

name	date
TEXT	TEXT

#### APIs

- YH (Yahoo) Finance
  - This API provides access to information about finance and about stocks, providing real time market data, historical stock prices, etc.
  - We utilize this API to provide the data that will be displayed within XÆA-69.
- AdviceSlip
  - This API provides the user with random slips of advice.
  - We use this API to offer (unrelated) life advice to the user before they decide to purchase or watch a stock.
- Calendarific
  - This API provides worldwide holidays and the dates for them.
  - We use this API to help the user identify upcoming holidays and allow them to take into consideration holidays when observing stocks.

#### 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	X	X
User Authentication	X	X		
Watchlists		X		
Button Filters		X		
Holiday API	X			
Advice API	X			X
Front-end (HTML)			X	
Front-end (CSS + Tailwind)			X	
DB Lead		X		
Final Testing and Bug Fixing	X	X	X	X