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Period 9

Project 01: News Site

Team: Mayonnaise

#### Overview:

Mayonnaise News is a website that gives information on current topics like news, weather, stock prices, currency exchange rates, and sports scores. Our website makes it easier for a user to find all the information they need to start the day in one place. Once logged in, the user can save preferences, like location for weather, topics for news, teams/sports for scores, and currencies for exchange rates. Another unique aspect of our website is that it is a balanced source of news articles. When top news stories are displayed, articles from both sides of the political spectrum will be displayed simultaneously.

#### Components:

Home Page: The home page will contain 5 tabs for current news, weather, sports scoreboards (both college and professional), stock prices, and currency exchange rates. Each tab contains specific information for that topic.

#### Tabs:

- News: The page will display top articles from today. In order to be balanced, it will display conservative articles on one side, and liberal ones on the other. This way, the user can see what news topics and headlines each side cares about. The user can also indicate preferences (like topics, countries, etc.) for the site to display in addition to top headlines.

**APIs:** Google News API

**Databases:** Find user's individual table and use data from each entry that contains "news-topic" in the area field. Use the preference field in that entry to find a topic the user has saved.

- Weather: On the tab, there will be weather information. This will include a 7-day forecast and some simple information like precipitation for each day. Before the user logs in, there will be no information displayed until the user chooses a city. Once logged in, the city the user chooses will be stored so that next time they log in, weather information for their city will automatically load.

**APIs:** MetaWeather API

**Databases:** Find user's individual table and use data from each entry that contains "weather-location" in the area field. Use the preference field in that entry to find a location the user has saved.

- Sports Scoreboards: On this tab, there will also be sports scoreboards from a variety of sports and teams. Without logging in, the scoreboards will just show top or more recent

scores. Once logged in, the user can choose sports or teams they want to follow, and the scoreboard will display those recent scores.

**APIs:** My Sports Feeds API

**Databases:** Find user's individual table and use data from each entry that contains "sport" or "team" in the area field. Use the preference field in that entry to find a sport/team the user has saved.

- Stock prices: There will be an area on this tab with current stock prices. If the user clicks on the stocks tab, they will be redirected to a sub-page with more detailed stocks information and news. Without logging in, it will show top or notable companies. Once logged in, the user can choose tickers to add to their list, and the stocks panel will show prices of their stocks.

**APIs:** World Trading Data API

**Databases:** Find user's individual table and use data from each entry that contains "stock" in the area field. Use the preference field in that entry to find a stock the user has saved.

- Currency Exchange Rates: Lastly, on this tab, the page will display some currency exchange rates based on a base currency. If the user is logged in, they can specify and save a preferred base currency. If not, it will default to USD.

**APIs:** Exchange Rate API

**Databases:** Find user's individual table and use data from each entry that contains "currency" in the area field. Use the preference field in that entry to find a currency the user has saved.

Choosing user preferences:

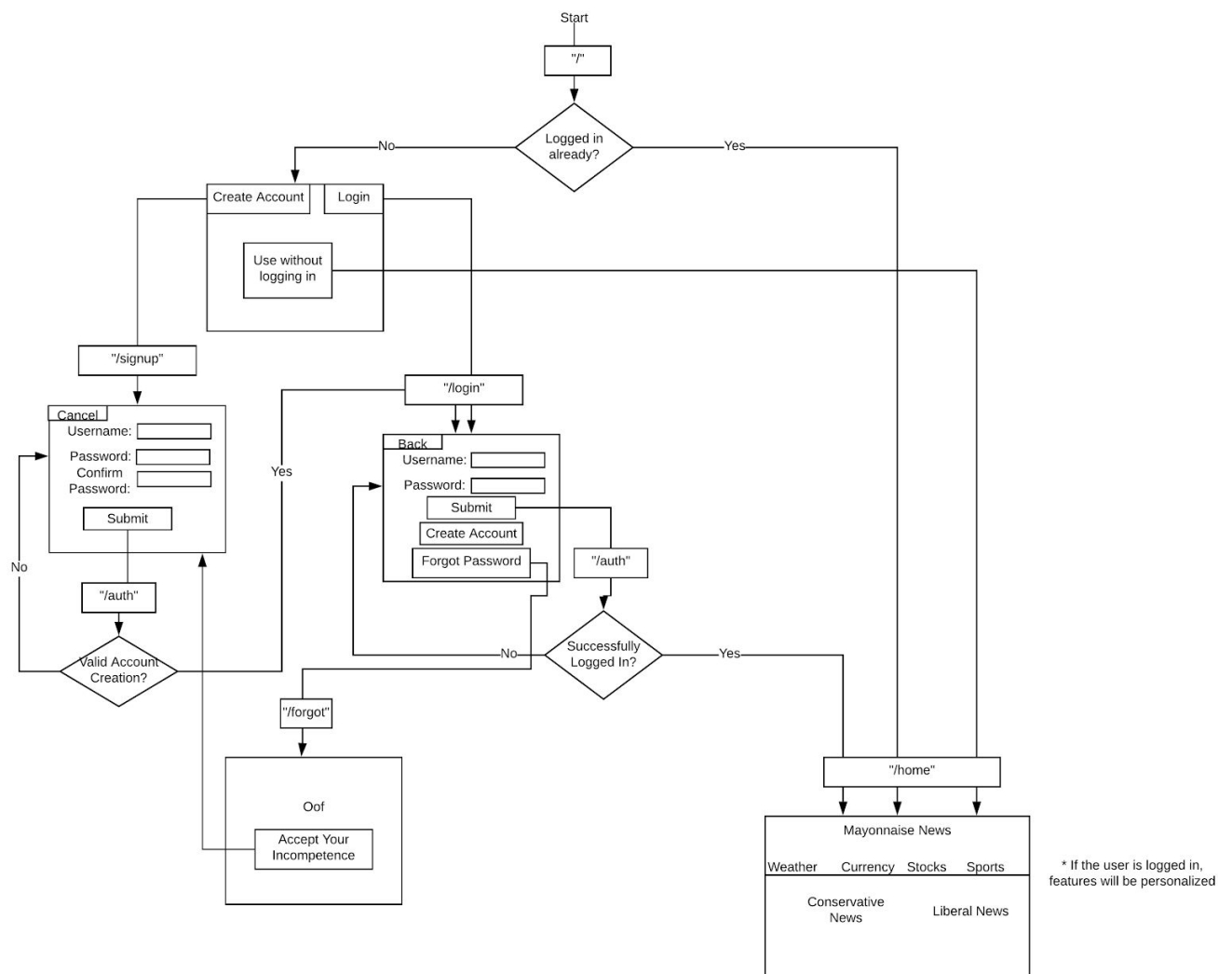
- On each tab, the user will be able to select preferences for that area by using a search bar or dropdown menu on the tab.

APIs

Name	Link	Key
Google News	<a href="https://newsapi.org/s/google-news-api">https://newsapi.org/s/google-news-api</a>	4ba270d537ab4112a9a5b3d88bac6bb0
MetaWeather	<a href="https://www.metaweather.com/2459115/">https://www.metaweather.com/2459115/</a> <a href="https://www.metaweather.com/api/">https://www.metaweather.com/api/</a>	No key required
Exchange Rate	<a href="https://api.exchangerate-api.com/v4/latest/USD">https://api.exchangerate-api.com/v4/latest/USD</a>	No key required

World Trading	<a href="https://www.worldtradingdata.com/home">https://www.worldtradingdata.com/home</a>	IFCiLvgdZRMew4GeMH7BfDoGU8CYtkA8AlXqb4rwWXCmTrk8fg9ytnc0DCG
My Sports Feeds	<a href="https://www.mysportsfeeds.com/data-feeds/api-docs/">https://www.mysportsfeeds.com/data-feeds/api-docs/</a>	70fd0946-87d0-44ec-9e65-a5e421

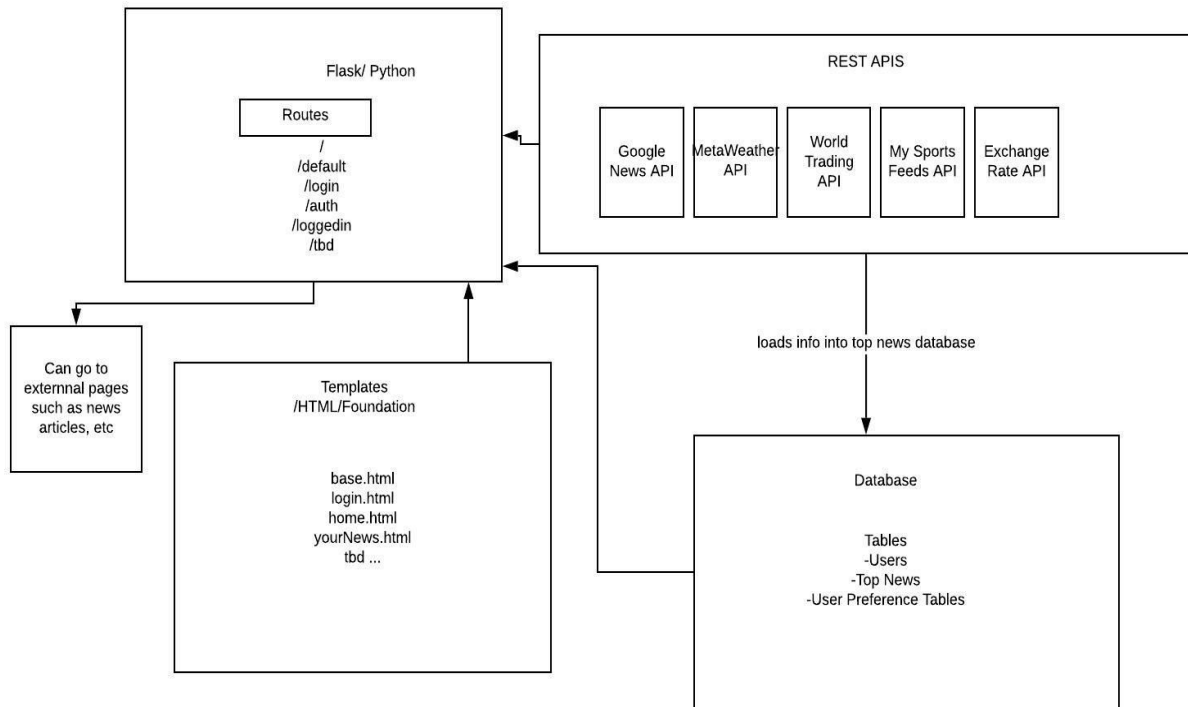
Site map:



“/home”, News tab:

Log out	Mayonnaise News				Welcome, janedoe!								
Tabs:	News	Stocks	Currency Exchange	Weather	Sports								
<div>News Picked for janedoe</div> <p><b>Cryptocurrency:</b> *Wyoming is getting ready to start banking with cryptocurrency. *Cryptocurrency Regulation: An Indian Perspective</p> <p><b>China:</b> *China deploys military in Hong Kong protests. *Leaked papers show details of surveillance of Uighurs in China</p> <div>Top News Stories</div> <table><thead><tr><th>Liberal</th><th>Conservative</th></tr></thead><tbody><tr><td>* Trump lashes out at witness ahead of public testimony. (CNN, 15:25)</td><td>*Dem smear campaign against Trump led to deeper WH involvement in Ukraine. (Fox, 19:07)</td></tr><tr><td>*Hillary Clinton's plane returns to gate after mechanical issue. (CNN, 19:39)</td><td>*Hunter takes down 17-point buck after tracking it for 6 years. (FOX, 14:12)</td></tr><tr><td>*Elephant kneels on car in Thailand. (CNN, 02:17)</td><td>*Kellyanne Conway slams CNN's Wolf Blitzer for bringing up her marriage: 'I'm embarrassed for you'</td></tr></tbody></table>					Liberal	Conservative	* Trump lashes out at witness ahead of public testimony. (CNN, 15:25)	*Dem smear campaign against Trump led to deeper WH involvement in Ukraine. (Fox, 19:07)	*Hillary Clinton's plane returns to gate after mechanical issue. (CNN, 19:39)	*Hunter takes down 17-point buck after tracking it for 6 years. (FOX, 14:12)	*Elephant kneels on car in Thailand. (CNN, 02:17)	*Kellyanne Conway slams CNN's Wolf Blitzer for bringing up her marriage: 'I'm embarrassed for you'	<b>Your Preferences</b> Cryptocurrency China <b>Add an Interest</b> Search
Liberal	Conservative												
* Trump lashes out at witness ahead of public testimony. (CNN, 15:25)	*Dem smear campaign against Trump led to deeper WH involvement in Ukraine. (Fox, 19:07)												
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## Component Diagram:



## Database Layout Diagram:

### Users table

Username	Password
johnsmith	tree123
janedoe	shrub13

### Each user's individual table:

Table: janedoe

Area	Preference
news-topic	cryptocurrency

stock	Disney
sport	baseball
team	Toronto Raptors
news-topic	China
weather-location	New York
base-currency	USD

Table: johndoe

weather-location	San Francisco
news-topic	international

Since johndoe hasn't specified preferences for sports, currency, or stocks, top results will be displayed rather than anything specific to the user.

### topnews Database

This database contains info pulled from the Google News API. Each time a user opens or refreshes the news page, only new news articles (more recent than the date/time of the most recent article already in the database) will be added to the database. This will make loading the news tab more efficient since most stories will already be loaded in.

Date/Time published	Title	Author	Source	Description	Link	Image	Political side
"2019-11-18T23:40:00+00:00"	"Colorado Man Patrick Frazee Found Guilty Of Beating Fiancé To	Stephanie K. Baer	Buzzfeed	"A Colorado man was sentenced to life in prison Monday after a jury found him guilty of beating his fiancé to death and then burning her body on his ranch. Patrick	<a href="https://www.buzzfeednews.com/article/skbaer/patric-frazee-kelsey">https://www.buzzfeednews.com/article/skbaer/patric-frazee-kelsey</a>	<a href="https://img.buzzfeed.com/buzzfeed-static/stat19-11/19/0/camp">https://img.buzzfeed.com/buzzfeed-static/stat19-11/19/0/camp</a>	Liberal

	Death, Burnin g Her Body"			Fraze, 33, was also convicted of one count of tampering with a deceased human being, and three... [+1276 chars]",	-berr eth-m urder -verd ict	aign_ image s/602 ealbc 7325/ a-col orado -man- was-s enten ced-t o-lif e-in- priso n-fo- 2-179 9-157 41242 00-0_ dblb big.jpg	
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Roles: (See components above for more detailed descriptions)

1. **Login and Users:** Albert
2. **Database:** Brandon
  - a. Functions to get all preferences in an area
  - b. Functions to get most recent article in topnews.
3. **News:** Lauren
  - a. Perform searches on API for articles on both sides of political spectrum.
4. **Sports:** Biraj
5. **Currency Exchange:** Albert
6. **Stocks:** Brandon
  - a. Get stocks data from the past too.
7. **Weather:** Lauren
8. **Foundation CSS:** Biraj
  - a. Make the tabs on the homepage.

