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SoftDev

P01 -- A website making meaningful use of frontend frameworks and RESTful APIs

2021-12-09

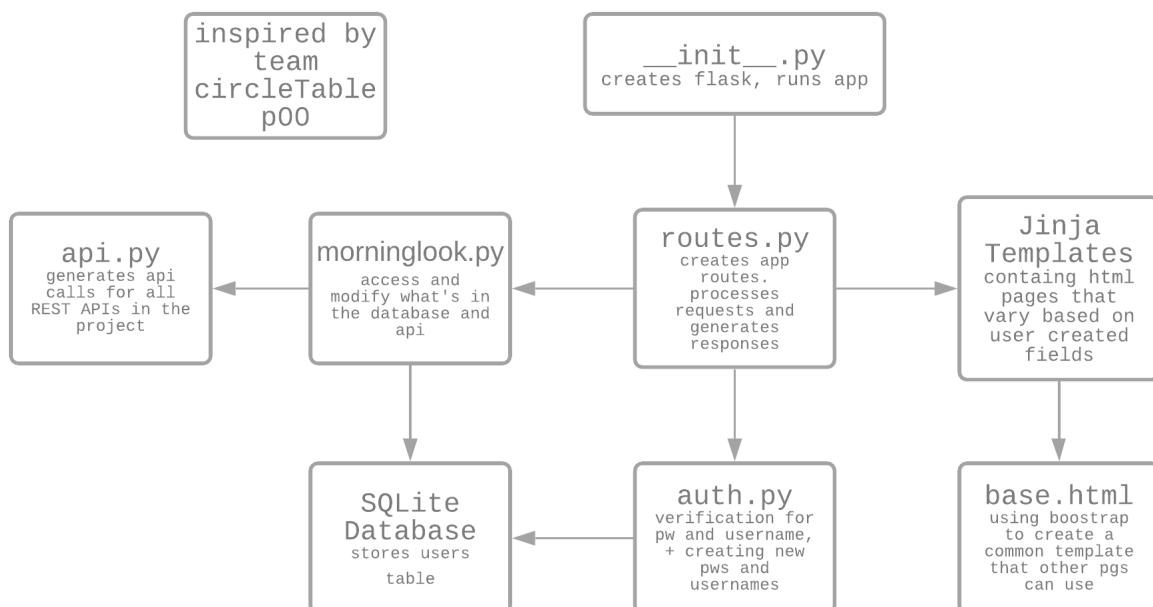
time spent: 2.6

## Features

- A homepage that displays snippets of useful/fun information to start your day in the format of separate widgets for each category, arranged in a responsive grid
  - Each widget is served by a different API (NYTimes API, SportRadar API, NASA Open API, FunFacts API, Weather API Stock API, and Books API)
  - Widgets will link to their category subpage
- Each category also has its own page displaying a greater variety of content in that category
- Through a preferences page:
  - The user can select different checkboxes affecting which widgets will be displayed on their home page (refresh their homepage based on what they check)
  - In certain categories, the user can customize the type of content they would like to see (e.g. filtering by news topic in the news section)
  - The user can customize the color scheme of the website
- The user can login, allowing them to save their preferences; otherwise their changes will not be saved

## Program Components

- Bootstrap: for front end organization and displaying everything, html and css
- Flask: web microframework
- Python: for database, connecting flask, generating api requests, and
- SQLite: database for user sign-in and saving home page preferences



## Database Organization

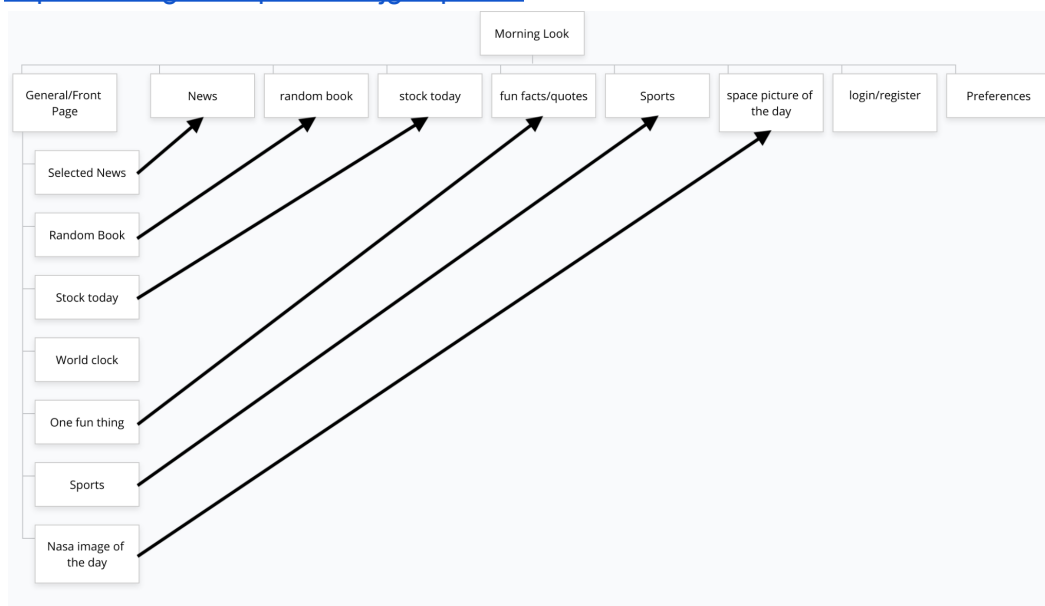
- Used if there is a user logged in
- User login(account, password)
  - Ties into customization (each user can customize:
    - Theme of the page (Bootstrap theme color, e.g. “Danger” or “Primary”)
    - What’s displayed on their front page
  - Api calls cached

## Users

ID	Username	Password	Theme	Weather	News	etc.
1	User1	pass1	Danger	1(true)	0(false)	etc.
2	User2	pass2	Primary	1	1	etc.

## Front end sitemap

<https://www.gloomaps.com/EjgR4pAdv9>



## Using Bootstrap

- Easier to understand and use
- Has more copy and paste-ability for how we want to present things
- Themes are more intuitive to implement

## APIs Used

- WeatherAPI
- FunFacts
- NYTimes API
- SportRadar
- Nasa OpenAPI

- Open Library API
- World Clock API

### **First Goal**

Homepage:

- News: NYTimes API, SportRadar API,
- Weather: Weather API
- A recommendation (book, Open Library API)
- Nasa Image generator: NASA Open API
- Fact Generator: FunFacts API

### **Second Goals**

- Login/Register
- Customizable Web Page
- Widget choosable

### **Third Goals**

- More widgets
- Widget subpages

### **Roles**

- Flask
  - auth.py - zhao
  - login - zhao
  - register - zhao
  - routes.py - everyone
- HTML
  - bootstrap templates
    - login - Owen
    - register - Owen
  - widget boxes - Owen
  - More detailed pages that expand on widgets - Owen & William
  - customizations
    - customizable theme - zhao
    - what's displayed on front page - William
- SQLITE DB
  - setting up db - Justin
- API
  - api.py - Justin

Ship Date -

01/14/2022