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SoftDev

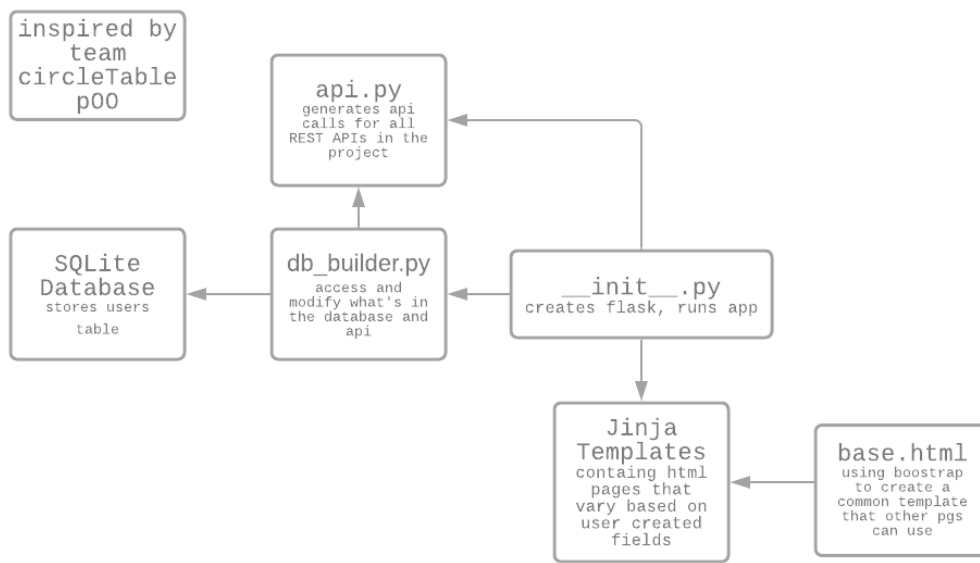
P01 -- A website making meaningful use of frontend frameworks and RESTful APIs

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, and OpenLibrary 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 sliders affecting which widgets will be displayed on their home page (refresh their homepage based on what they check)
 - The user can customize the color scheme of the website
- The user can only set their preferences while logged in; otherwise they will shown a default theme and all widgets will be displayed

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 processing data
- 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

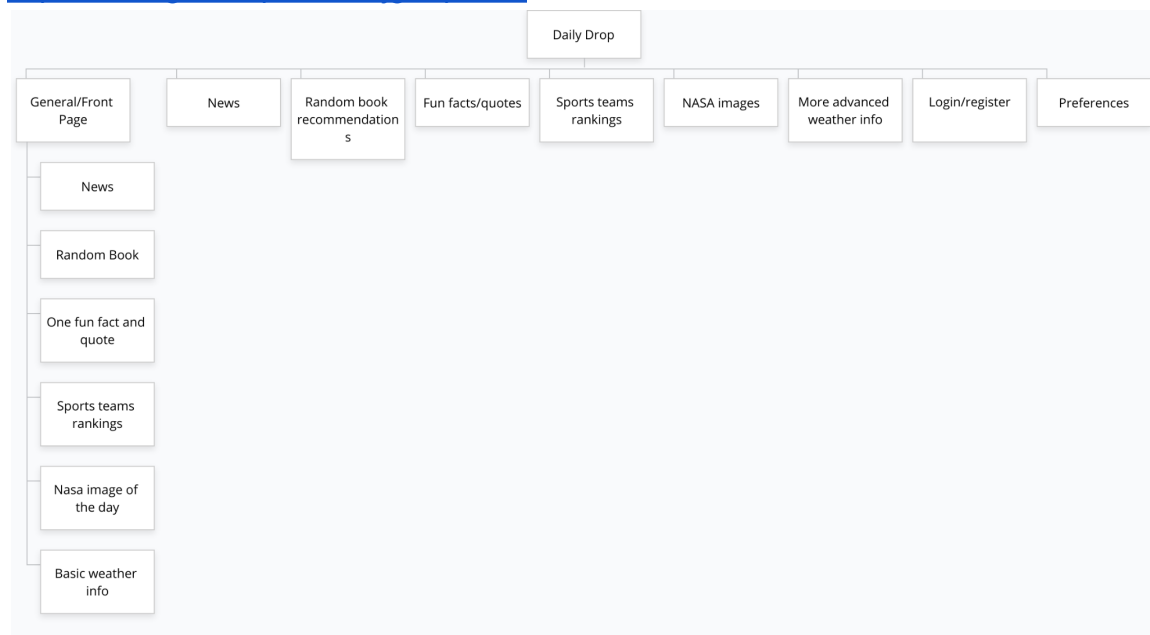


Users

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
- ForecastAPI
- Random Useless Facts API
- NYTimes API
 - Popular article
- SportRadar
 - NBA
 - NHL
 - MLB
 - NFL
- Nasa OpenAPI
- Open Library 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 -
01/5/2022