P1: Design Doc

WDMP (World Domination by the Magical Pinks)
PM April Li (Horanghae), Aahan Mehta (Spikes), Joshua Liu (Vengeful Whale), Yuki Feng (Ben)
SoftDev
Period 8
Target Ship Date: 2022-12-21

Framework: Bootstrap
APIS
- [Weather](): gets weather of given locations
- [OpenTripMap](): provides information of hotels and tourist locations such as location, descriptions, images, etc.
- [Google Maps](): provides directions to places
- [Amadeus](): provides flight information
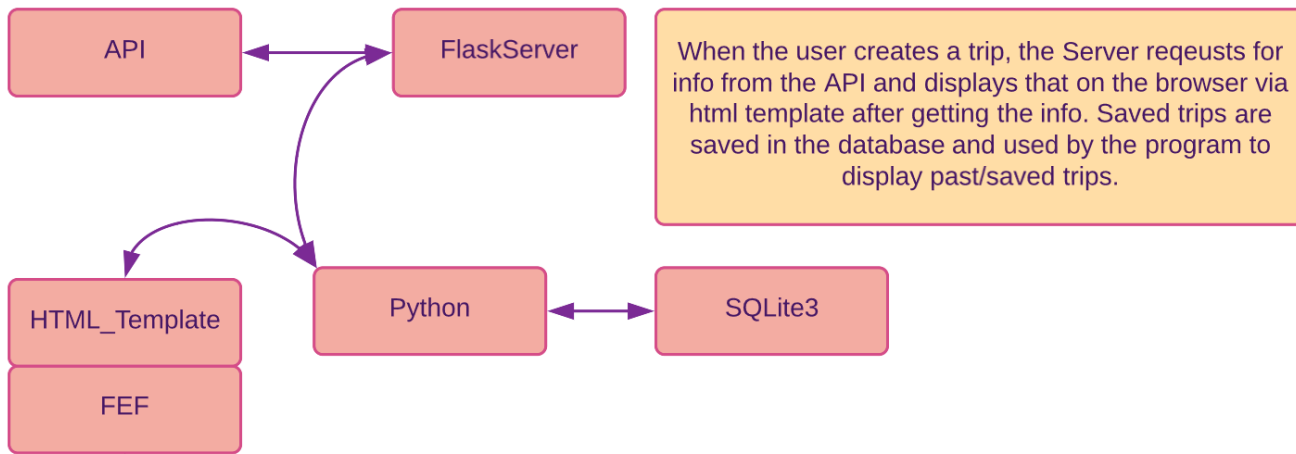

Website Description:
> Site Name: Trippin'
- Based on user selection, app will help plan a trip
- Tracks flights that goes from original destination to desired destination for given date(s) (Amadeus API)
- After user inputs information (what type of entertainment they want, how many activities they want to do per day, etc.), the website will generate a trip for them (OpenTripMap API)
  - User can still edit entertainment given by adding/deleting
    - Drop down will be shown of options that user can add
  - All entertainment locations will be shown on a map
    - New dot will be created at given longitude and latitude on map (Google API)
- When viewing each trip entertainment: will show a description of it with pictures, descriptions, etc. (OpenTripMap API)
- After trip is generated, user can select hotels based on location (OpenTripMap API)
- Based on weather, there will be automatic filters that will prevent certain attractions such as rain preventing outdoor activities (Weather API)
- After user creates a trip, the trip will officially be saved in the database

Bootstrap:
- We will be using the bootstrap .navbar class to allow users to navigate through the different pages on our site
- The spinner component will be used with our logo as the spinning image so users can have something fun to see the logo spinning as they wait for the page of results to load
- We chose bootstrap because the class name is easier to work with and it has more features

Component Map

When the user creates a trip, the Server reqeusts for info from the API and displays that on the browser via html template after getting the info. Saved trips are saved in the database and used by the program to display past/saved trips.

Python
- Python will be used to connect database with flask server
- Make calls to APIs to retrieve information that we serve up

SQlite3
- Using database to store login data for users
- Store saved user trips

HTML Template
- Used to build up website in conjunction with flask

Flask
- Flask will be the server used to send requests to the APIs.
- Will be used to render html templates onto the browser.

FEF(Bootstrap)
- Will beautify the website.
- Make navigation between areas sites more user friendly.

Database Organization
- Only storing saved trips in database and user login information
- Saved trips will be composed of a composite key of user id and trip id.
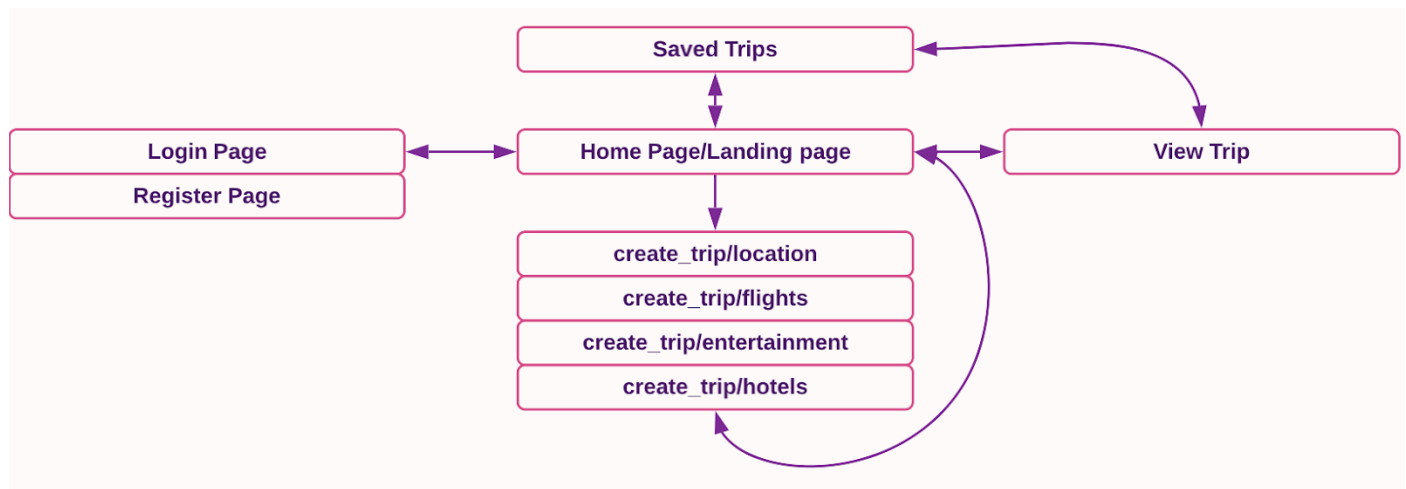 - Each trip id will have its own properties in another table.

user		
PK	uid	integer
	username	varchar(20)
	password	varchar(30)

savedtrips		
CK	uid	integer
CK	tripid	interger

tripinfo		
PK	tripid	integer
	Country	varchar(20)
	City	varchar(30)
	Hotel	varchar(40)

Site Map

Login Page
- User inputs username and password to enter website

Register Page
- User inputs new unique username and creates a password

Home Page
- Shows all trips created by the user.

Create Trip
- Location: dropdown menu that user can select a country then a city in that country
- Flights: user inputs the location they are traveling from and flight options will appear for user to choose
- Entertainment:
  - User selects what type of activities they want do and how many activities they want to do per day
  - Set of activities will automatically generate, but user can still edit activities
- Hotels: user will select which hotel they want to stay at
- Submit button at the end where user will add the trip to the database
- Note: user will be able to go back to old sections of create trip

View trip
- User views the specifics of selected trip

Breakdown of Tasks
- April: bootstrap/html
- Aahan: flask/api
- Joshua: database/flask/api
- Yuki: bootstrap/html

Extra:
- Map Clicking Interactions
- Will also display all restaurants around each activity user chooses

login

↓

landing page →→ new trip/location

| WOMP | new trip | saved trips | LOGIN |
| | | | LOGOUT |

Discover trips!!

Trip1 (pre-planned)

Trip 2

....

↓

new trip/location

Nav bar

Shows after selecting country
Country: [dropdown ▽]
→ City: [dropdown ▽]
[Submit]

↓

new trip / planselection

Nav bar

What type of actvtes
do you want to do
☐ amusement part
☐ zoo
☐ museum
☐ [Submit]

↓

Nav bar
List of places

[Place 1]
[Place 2]

after clicking
on place show location

Nav bar
• Hotels
[Hotel 1]
[Hotel 2]

will
show map with
hotel location
in respect to
locations chosen

↓

[Create trip]

↓

Saved trips

Nav bar

trip1

trip 2