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Software Development

P01 Design Doc: ArRESTed Development

2022-12-06

time spent: 2.5 hours

Target Ship Date: 2022-12-21

GENERAL IDEA

A website designed to help someone find things to do and places to go during a layover in between flights.

- Input: Airport/Airport Code, Layover Start Time, Layover End Time
- Output: List of Businesses, Hotels, and Restaurants that the user could to during the specified layover
 - o Images?
 - Links to Yelp and google maps?

PARTS

Front End Framework: Bootstrap

Our resident front ender decrees so. "Foundation buttons are ugly." He also already made a great landing page with bootstrap, so we're switching.

APIs in Use:

- Airport API:
 - https://rapidapi.com/blog/airport-info-api-with-python-php-ruby-and-javascript-examples////info-api-with-python-php-ruby-and-javascript-examples///info-api-with-python-php-ruby-and-javascript-examples///info-api-with-python-php-ruby-and-javascript-examples///info-api-with-python-php-ruby-python-php-ruby-python-php-ruby-python-php-ruby-python-php-ruby-python-php-ruby-python-php-ruby-python-php-ruby-python-p
 - O To get the coordinates of an airport from a name, an IATA code, or an ICAO code which airports are given as identifiers.
- Yelp
 - https://docs.developer.yelp.com/docs/fusion-intro
 - Using the coordinates of the airport, we find nearby businesses and restaurants within a 5 mile radius with appropriate open hours
 - Business must be open before halfway point of layover time
- <u>Hotels</u>
 - o https://rapidapi.com/davidtaoweiji/api/priceline-com
 - Using the coordinates of the airport, we find hotels w/in a 5 mile radius available for overnight/longer overlays
- Embedded Google Map
 - https://developer.tomtom.com/map-display-api/documentation/raster/map-tile
 - Adding bits of google maps to show the location of the businesses on Google Maps

Database Storage:

- Users
 - o Column 0: Username
 - o Column 1: Password
- Business Feedback
 - o Column 0: Name of Business
 - Column 1: Location
 - o Column 2: Net Rating
- Hotels
 - o Column 0: Name of Hotel

- o Column 1: Coordinates of Hotel
- o Column 2: Name of nearby airport

Python:

- One Flask App that acts as the middleman between the front end framework and the information from APIs and the database
- A program that holds a bunch of functions that interacts with the database directly
- A program that uses all of the APIs so that the users don't rapidly use up all of the API requests

PLANNING

Tasks:	
	Accessing the 3 APIs via Python
\checkmark	Make API eards
	Airport (Emily)
	✓ Yelp (Gabriel)
	✓ Hotels (Thomas)
	Database Logins and Registration
	Take in user requests and getting info from API
	Storing the businesses and hotels onto the API
	Map API
	Embedding the Google Maps to show businesses and hotels
	Front End Stuff to beautify the site
Sadi: D	: Foundation API
Prioriti	zed To-Do:
Due for	Mon class:
	Emily: All methods in api_handler.py (not map api) (moved to Tues)
	Gabriel: Homepage for site (moved to Tues)
	Thomas: Flask app for registration and login (move to Tues)
	Sadi: Login and registration stuff and probably new map API, hopefully
Other:	
	Access keys from keys folder, not directly coded in api_handler.py
	Do layover time/hours open for yelp_api
	End of project: make sure requirements.txt is up to date Update design doc at some point?
	□ New APIs
	API Key issue handling
	☐ Bad key
	☐ Key not found
	Accessing keys from anywhere in the file directory (deliverable) (Emily)
_	Someone else testing this

☐ Fix launch instructions		Fix	launch	instr	uctions
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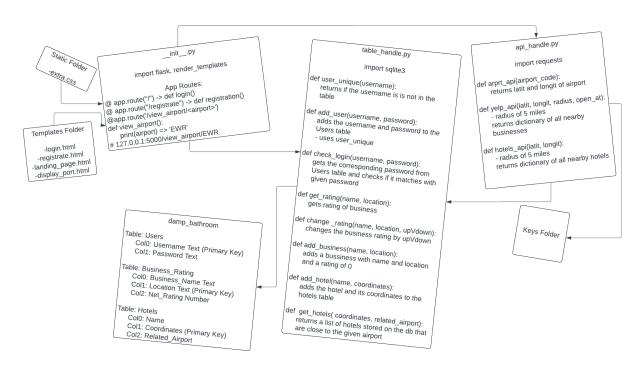
Restaurants, Businesses, and Hotels should have:

- Name
- Street Address
- Phone Number
- Link to website
- Price
- Hours
- Rating

Stretch Goals:

- Put an <u>embedded google map</u> into the website in which users can navigate to their airport and click on a pinpoint to select their airport
 - Would work for any location selected, not just an airport
- On results page, list top 3 places for each category
 - "See more" button for each category
 - o put hotels, businesses, and restaurants on separate pages
- Have page not refresh when an upvote/downvote is submitted (like YouTube)
- Advanced search feature which accounts for price

COMPONENT MAP



SITE MAP

