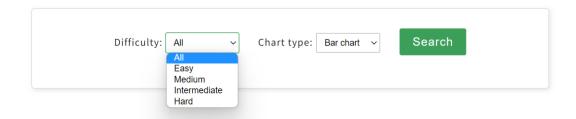
Task 2.7

Data Analysis

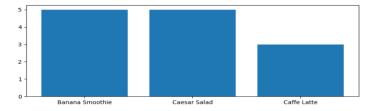
I added the feature to search recipes by difficulty level and display its data on the table and preferred chart. Users can choose difficulty level (or choose 'All' display all records from the database) and the type of chart that they want the data to be displayed on from the dropdown menu.



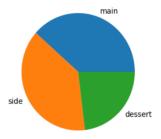
According to user's search criteria, the app returns the filtered records as QuerySet. The app then converts the QuerySet to pandas DataFrame, and display the results as table.

The app also provides data visualization using 'matplotlib' library. The following images are charts of recipes in the database with 'Medium' difficulty.

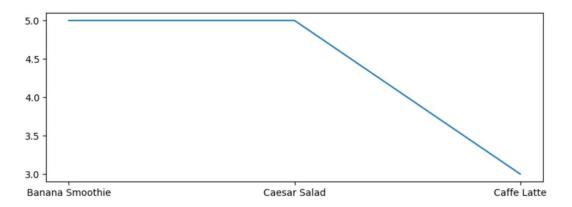
	id	name	category	cooking_time	serving	ingredients	directions	pic
o	2	Banana Smoothie	main	5.0	1	Frozen Banana, Milk, Peanut Butter, Sugar	Break frozen bananas into smaller pieces. \r\n2) Add all ingredients into the blender. \r\n3) Serve it in the desire glass.	recipes/banana_smoothie.jpg
1	3	Caesar Salad	side	5.0	1	lettuce, parmesan cheese, croutons, Caesar dressing	Wash lettuce and place it in a large bowl. \r\n2) Add grated parmesan cheese and toasted croutons. \r\n3) Add Caesar dressing on top.	recipes/caesar_salad.jpg
2	5	Caffe Latte	dessert	3.0	1	grounded coffee, hot water, warm milk, sugar	Make filter coffee with grounded coffee and hot water. \r\n2) Pour warm milk and add sugar of your choice.	recipes/caffelatte.jpg



Bar chart (x-axis: recipe's names, y-axis: cooking times)

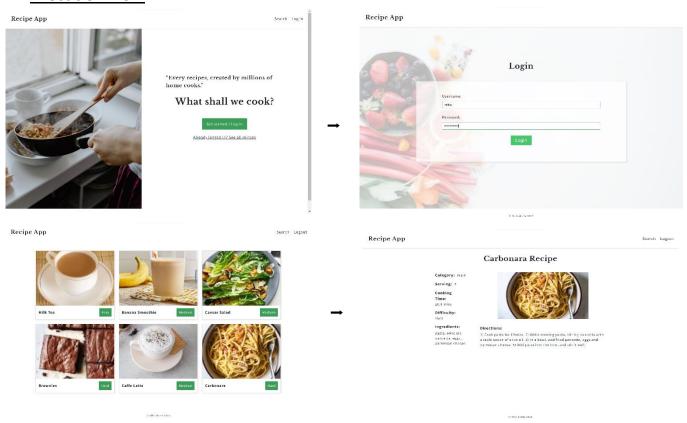


Pie chart (label: categories of found recipes, ratio: cooking times)



Line chart (x-axis: recipe's names, y-axis: cooking times)



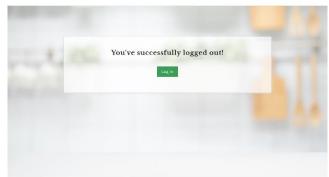


Difficulty: | Herd | v | Chart type: | Pe der: v | Search

	Id	name	category	cooking_time	serving	Ingredients	directions	pic
0	4	Brownies	dezsert	40.0	2	plain flour, eggs, sugar, cocoa gowder, chopped chocolate, butter	11 Macs about in his vaster and for the checulars and butter melt foracher, which well. I virial? Whish eggs and super well in another boost, virial? Whish eggs and super to the about 1, virial, and of taked oggs and super to the about 1, virial, and pain filter and above a power and mist veed. I virial. Pour the miscure into a supere till friend with basing paper and basile in a 160°C ower for about 13 minutes. I virial but the homomes cool completely before allique.	recipes/brownie.jpg
1	6	Carbonara	main	20.0	2	pasta, olive oil, pancetta, eggs, parmesen cheese	Cook pasta for 16mins, 2) While cooking pasta, stir- fry pencetta with a table space of olive oil. 31 in a bowl, add fried pancetta, aggs and parmean cheese. Ald pasta into the bowl and stir it well.	rccipes/carbonara.jpg



Recipe App



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