

Mooncake

Goal: Develop an 'all-in-one' food organizer that allows users to form meal plans for the week according to their lifestyle needs. Solves further subproblems 1) Counting calories, enabling users to enjoy a healthy lifestyle, and 2) enabling users to enjoy a diverse and balanced diet that suits their daily lives

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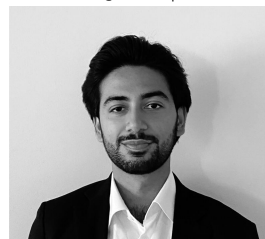
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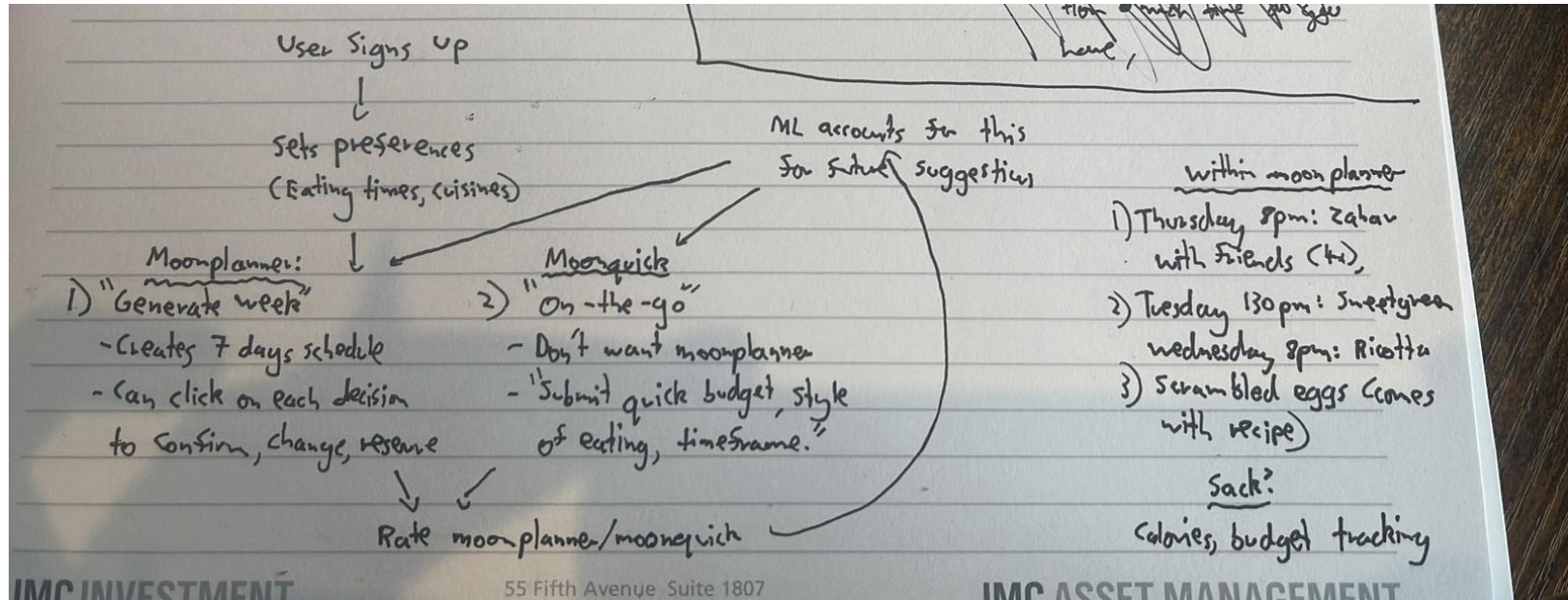
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Redefining Mooncake



The “New,” Streamlined Mooncake

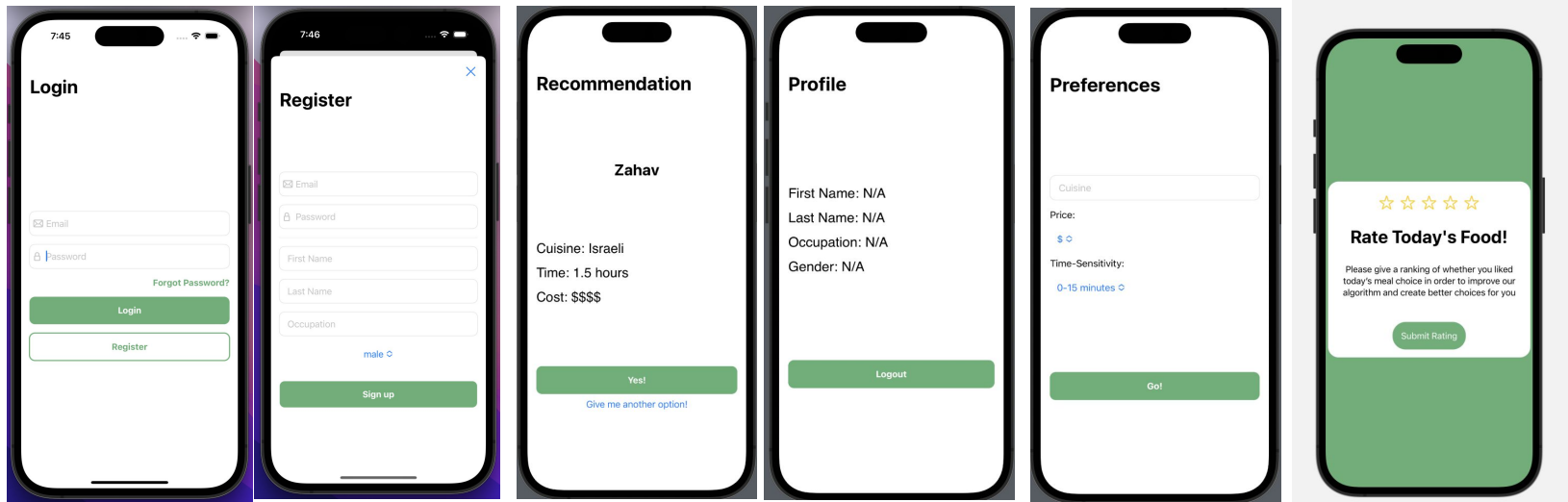
- Shifted focus away from producing a ‘weekly meal planning schedule’ for people.
 - Too many variables to deal with.
 - The notion of giving people their exact meal plan for a week is rather vague
 - Too many integrations required
- Our value creation is optimizing **where and how people eat/enjoy food, receive feedback from choices we give them, thereby improving further recommendations (ML Implementation).**
- A More “Streamlined” Mooncake:
 - 1 - User wishes to eat a meal
 - 2 - User specifies other pertinent criteria (type of meal: restaurant/at-home; cost; time-constraint)
 - 3 - Mooncake returns an ideal meal choice given their criteria.
 - 4 - If user rejects meal choice, Mooncake offers further options until user selects acceptable option.
 - 5 - User rates overall meal experience, this gets fed back into ML Algorithm
- Overall vision is for users to get one-time meal recommendations in a timely, ‘on-the-go’ manner, instead of trying to provide them with an ‘entire schedule at once.’

Frontend Update: Xcode

Refining UI using Xcode and Swift UI.

- User sign-up page: Where the user creates a Mooncake account.
- User log-in page: Where the user logs in to their Mooncake account.
- Recommendation preferences page: Where users will put in their criteria for a recommendation for a particular meal.
- Recommendation pages: Where users will receive outputs from our ML algorithm as to where/how they should eat for a particular meal.
- Profile Page: Shows user profile and preferences
- Feedback page: Where users rate Mooncake's suggestions for food, which will be fed back into our ML algorithm.

Will also have a home page



Cleaning up data + Updating ML Recommendation Engine

- Last time we had a recommendation engine that showed how likely a person was to like a restaurant that was input into the engine
- Now, we have a ranking of each restaurant in the database that will feed into the app and when that user is logged in, that is used to give recommendations based on what they are looking for (time, price, calories etc.)
- We also plan to recommend recipes using the most liked ingredient that the user has based on the data we collected
- All the feedback will be fed into the algorithm to avoid repetition as well as ensure that the best recommendations are given
- We need AWS credits to ensure we can keep running the model in the background and not have to shut it down after testing
- Currently our backend functions for APIs work locally and give fantastic insight.
- Next steps: host our backend functions for making recommendations on EC2 and expose an endpoint using AWS Lambda Functions

Recommendations (4)	
The items ranked by relevance for the user are displayed. The score represents how relevant the item is for the user. Higher scores represent more relevance.	
Recommendation ID	
RID-f5-46c5-80ad-bc91fcedc730-CID-099f0c	
Item ID	Score
34	0.5707071
1	0.4159144
123	0.0085827
56	0.0047960

