Food Travel App

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Version #1

Summary of Project

Food and dining experiences are among the top three most important factors in travel decision making, behind shopping and sightseeing (McKercher et al). In order to facilitate decision making and enhance the travel experience, this app will suggest culinary destinations and activities that reflect the preferences of the user, whether that would be historical significance, experiencing local culture, or tasting unique cuisines.

Our app “FastFood” simplifies the decision-making process that goes into choosing a restaurant to eat at while traveling, whether by yourself or with a group. “FastFood” will swiftly recommend nearby restaurants based on your preferences, saving you time and avoiding the hassle.

Project Analysis

Value Proposition

(What are the pain points or problems you’re addressing? For whom? If possible, cite facts that support your claim that these are real pain points/problems to address)

According to research done by Expedia, the average traveler spends over 5 hours researching travel content for each trip. This app will remove the mental load of researching recommendations for eating and/ or drinking when traveling or even when staying at home. Users will, without effort, be guided towards trendy and interesting places. This app aims to simplify and enhance the travel experience.

Source: https://www.expediagroup.com/investors/news-and-events/financial-releases/news/news-details/2023/TRAVELERS-SPEND-OVER-5-HOURS-RESEARCHING-TRIPS-ON-AVERAGE---LONGER-THAN-FLYING-FROM-LOS-ANGELES-TO-WASHINGTON-DC---ACCORDING-TO-EXPEDIA-GROUP-RESEARCH/default.aspx

Primary Purpose

(Summarize the purpose of the project – could be something focused on the benefit of the target audience, your customers, your “company,” or even public good)

Connects users to unique, interesting, or significant places to eat/drink in a particular area, based on user preferences.

Target Audience

(State your target demographic, be as specific as you can. Why are you targeting this demographic? How do you plan you reach it?)

According to survey data, the age group that travels the most is 23-38. Our app targets this group as our primary demographic, as the people that are most likely to use this app are those who either travel a lot, or eat out a lot. Furthermore, this demographic is of interest because they are likely to have a willingness to spend on travel and dining experiences. Additionally, this is a particularly tech savvy age range, making them more likely to see and adopt an app such as ours.

We can reach this demographic in a few ways, but mostly through taking advantage of platforms that are popular with the age range, such as marketing on Instagram or partnerships with influencers.

Sources:
https://www.condorferries.co.uk/travel-statistics-by-age-group#:~:text=Millennials%20between%2023%2D38%20seem,35%20vacation%20days%20a%20year.

https://gitnux.org/eating-out-statistics/#:~:text=According%20to%20a%202018%20study,compared%20to%20other%20age%20groups.

Success Criteria

(How will you know whether your app was successful? Financial gain? User satisfaction? Market share? Public good? How will you measure the success?)

For success criteria we want to focus on market share and user satisfaction. Market share can be determined based on downloads, active users, database requests, and user data such as location data. User satisfaction will be measured based on user feedback.

Competitor Analysis

(Summarize strengths/weaknesses of your competitors as compared to you – does not have to be in-depth, focus on things that relate directly to your purpose and value prop)

Some competitors identified are google maps, yelp, instagram and trip advisor.

Google maps - primary purpose is not to suggest food. While it has ample content it recommends restaurants that may not be open or vaguely related to your search query.

Yelp - Primarily a review platform, monetization by showing sponsored results

Instagram - Primarily a social media app. Dining and bars being largely a social outlet, Instagram is an effective way for these businesses to connect with potential customers. As a result this is where people expect to see recommendations when planning an upcoming trip. Additionally Instagram provides curated video and photos of these businesses which people may prefer to see before visiting.

Trip Advisor - Similar to Yelp, primarily a review platform for a broad variety of travel related destinations

Strengths of “FastFood”

Speed and simplicity is a main strength of the app; most of the research work can be taken out for travelers or individuals searching for diner options, and recommendations can be made swiftly..

Apps like google maps can sometimes struggle with filtering restaurants based upon your preferences. For example, if you search “Indian restaurants” you may sometimes find Thai cuisine because curry is on the menu. Our app seeks to deliver suggestions based upon individual preferences, which is a strength some other competitors do not have.

Monetization Model

(Briefly propose a monetization model)

In App Advertising

The app will largely follow the monetization model of “the users are the product”. That being said, monetization will likely happen through in-app advertising for a few reasons. The largest reason is to avoid a freemium model. Our app’s strength over its competitors is how streamlined it can be, and adding premium features would make us lose that advantage over the competitors. At that point, the app would be a lower functionality food app compared to others. While we are using in-app advertising, we want to avoid ending up in situations like Yelp, where

the first 8 or so recommendations are sponsored. If the app does really well, a competitor may even buy it.

Initial Design

The purpose of this section is to define the "Minimum Viable Product" (MVP). It may also be useful to call out the scope and expected/known limitations for your product here.

Necessary components/interactions

- *Get and upload user preferences (implies storage)*
    - *Input restaurant preferences (type of cuisine, Chinese, Japanese, etc) as well as dietary restrictions and preferences.*
- *Ask for location permissions, or ask them to enter starting location if denied*
    - *Identify current location and suggest nearby restaraunts*
- *Search restaurants/points of interest*
    - *Search algorithm (implies database searching, some sort of indexing based upon user preferences)*
- *Display restaurant or point of interest*
- *Reroll button if the recommendation wasn't satisfactory*
- *Feedback system*
    - *Users need to be able to rate and review, which can refine recommendation accuracy over time*

Services/APIs?

- Google maps API integration
- APIs to query and display recommendations

UI/UX Design

(Call out important UI/UX components to have an MVP – does not have to be polished, but should keep the audience, purpose, and value prop in mind)

Crucial UI (more details in navigation flow)

Home screen: Display current user preferences (with edit button so they can change). The home screen can have an optional profile/account creation button (this is not technically part of

our MVP, since we want to simulate apps like TikTok which promote accessibility through not requiring an account to be set up. Should also have the “give me a recommendation” button.

Signup screen

Page asking for necessary information

A page asking for them to rate the recommendation

A page highlighting the recommended restaurant, with a reroll button on it.

Minimum required navigational flow

Optional login/signup screen: Signup is optional, and simply ensures if the app is deleted, user preferences can be tied to an account in case they ever re-download and use the app.

Once signup/login is done or skipped, there are three scenarios.

1. If it is a first time user, ask for necessary information about preferences (dietary restrictions, preferences, distance willing to drive, price range, etc).
2. If the user has recently used the app for a recommendation and it has been a few hours, prompt them with a page to rate the recommendation.
3. Otherwise, Move to the home screen which is the main interface displaying a button which says “give me a recommendation”.

Once the button is clicked, move to a page which displays the details of a restaurant (the recommended choice).

- This screen should also have a “reroll” button; if the user does not like the recommendation or simply aren’t feeling that kind of cuisine, or don’t feel like visiting the recommended location, they can get a new suggestion.

Technical Architecture

(What are the necessary components to support an MVP? Data structures? Storage considerations? Web/cloud interactions? Be sure to put in some thoughts as to how to measure your success here. Call out dependencies on 3rd party services/APIs here, too)

Dependencies:

- Location APIs: Will need to use services such as google maps API, or a similar API for accessing location data.

- Restaurant data API: Will need to integrate with APIs in order to fetch restaurant data; this may be done with other food app APIs like Yelp.
- Database services: Certain data such as preferences and feedback may need to be stored using database services.

Business logic: Our algorithm for suggesting restaurants and locations based on user location and preferences. (gathering user preferences is our solution to the cold start problem).

Success can be measured here by tracking downloads, active users, and feedback.

Data management

- User data needs to be stored so that they don't have to enter preferences every time they use the app (although they can edit it, and certain preferences like how far they are willing to drive and price range may change regularly)
- Restaurant data needs to be stored in a database

Challenges and Open Questions

Identify technical challenges that may come up (e.g. hardware limitations, access to data/services, performance issues, etc.) and propose some solutions to the identified challenges. Also include questions on matters that you are unsure/unclear about that requires feedback from peers, users, or additional research.

1. Resource constraints: Ideally, access to the internet shouldn't be a problem, as location data is the important factor. How are we going to make it so the information can be pulled without the internet?
    a. We will ideally solve this problem, as it would be fairly annoying to run into. One potential solution might be to store critical data on the user's device so it can be accessed without the internet.
2. Permissions: The only permission we need is access to location. If this isn't provided, how can we make the app viable?
    a. We can get around this by prompting the user to enter location manually
3. Restoration of data on reinstall: Since user preferences are important for our recommendation system, we should think about if this is saved on uninstall/reinstall.
    a. A potential solution would be to add optional account creation, and those who have accounts can tie their preferences to it in case of this situation.

Other challenges

- The architecture of the app will have to change for scalability if more people start using it. At that point, we might have to switch to cloud services or other paid methods.
- There are many dependencies on third party APIs such as for restaurant details and geolocation.

- A less simple version of the app would consider accessibility; adapting the app for different languages and making sure the UI looks good in those situations.

Questions

- Might there be monetization strategies we missed that would be more user-friendly and won't interfere with the app’s usability?