

CS 307 Team 20: NomNoms Project Charter
Professor Turkstra

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Project Title: NomNoms

1. Problem Statement

Many friend groups and couples have difficulty deciding where to spend time together, especially college friends reuniting during breaks. Disagreements in eating choices can lead to unnecessary tension, which our app aims to reduce or eliminate by aggregating the group's preferences and selecting a restaurant nearby for them.

Similar existing services include Restaurant Roulette; though Restaurant Roulette is also able to select a restaurant based on a user preference, it is aimed at one person. In addition, Google Maps can locate nearby restaurants of a specific type of cuisine, but for an indecisive friend group it can be difficult to choose a type of cuisine in the first place; our app will allow members to pick their cuisine preferences and join a group before generating an "optimal" restaurant.

2. Project Objectives

- Build a website to bring people together and create a convenient platform for simple food selection and a time saving mechanism for users
- Create a swipe right/swipe left system, in which users can decide which restaurant they approve as a part of their preferences
- Aggregate data of all common restaurant choices among users and develop a summarized information system that displays best restaurant choices
- Generate a location and price range system in which users will input their general location in order to find restaurants within their proximity and cost limits
- Create user profiles and a room system to allow users to be added, and temporarily join rooms so groups can receive restaurant picks based on their preferences

3. Stakeholders

- 1) Users: Users comprise any group of people looking to narrow the number of places to dine at based on preferences, location, and other filters.
- 2) Developers: Albert Xu, Prabhav Pande, Ruchitha Jagana, Jay Mehta, Dhruv Dhawan, Adithya Chandrasekar
- 3) Project Managers: Syed Muhammed
- 4) Project Owners: Albert Xu, Prabhav Pande, Ruchitha Jagana, Jay Mehta, Dhruv Dhawan, Adithya Chandrasekar
- 5) Restaurants: Sponsored restaurants looking to have their names on the top of the preference searches

4. Deliverables

1) Restaurant Rooms

- a) Allows anonymous and named users to select their restaurant preferences
 - i) Yelp API
 - ii) Database (MySQL or NoSQL ie Firebase)
 - iii) Gamified UI (Show one at a time)
- b) Users
 - i) Able to select restaurant preferences
 - (1) Location Data
 - (2) Cuisine Preference
 - (3) Filters like price range, distance
- c) Recommender System (Collaborative Filtering?)
 - i) Based on which restaurants user has selected/rejected, recommend next restaurant

(b) Specify any platform(s) and/or framework(s) which you plan to use.

1. Web App (Mobile Friendly)

- Front end
 - NextJS
 - UI Framework:
 - Mantine
 - Headless
 - NextUI
 - CSS Framework:
 - Bootstrap
 - Tailwind
- Backend
 - Database
 - Firebase
 - APIs
 - Yelp API
 - Google Maps API

2. Mobile App (if time)

- Swift
- Kotlin
- Flutter
- React-Native