

## **Phase 1**

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### Topic

Dating app that incorporates restaurant preferences as a key heuristic for determining compatibility. Since many first dates occur in a restaurant setting, it is important that both parties enjoy the occasion without the undue stress of determining where to go. Since the app automatically matches using food preferences, a location can be agreed upon beforehand to ensure all parties are satisfied with their date arrangement. Users simply enter their personal data, dating preferences, localization information, and can be quickly and easily matched with a partner with similar food interests. By simplifying the first step, users will be more successful in finding a companion.

### App Description

A user can create a profile with personal information pertaining to a standard dating application. In addition, they can specify the types of food, restaurants, or arrangements that they prefer the most. When the user goes to search for compatible partners, they can find a sorted list of people with similar food interests. They can then review the personal information of each match and determine their compatibility. If a date is desired, they may initiate contact and view food options that have been selected by both parties. They can then suggest a date at a location where both parties have indicated interest. This process guarantees the most simplicity in searching for and planning a first date over food. The built in map and messaging features makes this process easy and efficient.

## Development

Website will be developed in partitions with each person taking a specific area. This allows for maximum consistency in aesthetic and coding style as well as compatibility. The interaction between various partitions such as frontend and backend will be facilitated by both parties involved to ensure information is passed between them without loss and with appropriate security measures.

## Work Allocation

**Jason** - Front end website user interface, usability and graphics. The user will need to be able to enter and view information efficiently. The data sent and retrieved from the DBMS will have security along every access point in conjunction with the bank end server.

**Sikai** - Front end features, maps, user admin tools. The matching algorithm and returned results must be displayed to the user in a clear and coherent manner resulting in maximum user satisfaction. The administrator tools will be used to quickly view aggregate data, user specific data, as well as moderate communication and perform any other administrative tasks.

**Chang** - Back end authentication, security, and data retrieval. The data must be sent and retrieved from all forms and all user requests. The authentication must verify the user's access to the data before serving any data. Security must be implemented alongside front end measures to ensure security is maintained while data is in transit at all times.

**Tim** - Back end searching, messaging, location features. Algorithms must be used to identify matches based on user preferences and settings. Additionally, localization information must be used to ensure matches are in the same general area. The compatibility must then be saved and securely displayed to the user in conjunction with the front end. The private messages between users must also be saved in a safe and secure manner with access controls. Users must be allowed to view an archive of existing messages as well as compose new messages, also in conjunction with the front end.

## Plan

### Frontend

#### Login

- Email/Password
- Third party authentication through Github's OAuth

#### User Profile

- Personal information to determine dating profile
- Search options and localization to filter relevant searches
- Privacy settings to determine who can access profile

#### Search

- Filter by localization settings
- Search by food interest and any other criteria
- Return results based on compatibility

#### Ratings/Comments

- Comment on dating experience

#### Messaging

- Matched users may send private messages to each other
- Messages are secured and saved between sessions

#### Map

- Matched users may also view nearby restaurants
- Displayed results filter based on both user's food preferences

### Backend

#### Authenticate

- Create new user and save their personal information
- Verify user information and allow access

#### Storage

- Persistent user data and options across multiple logins
- Restaurant information
- Ratings and comments for each user

#### Search

- Access private information when matched with another user
- Access control depending on privacy settings

### Messaging

- Messages allowed depending on privacy settings
- Management system allows users to send, save, and delete messages

### Map

- Map view depends on location of both users
- Number of results depends on map size

### **Admin**

#### User

- View and modify any user's data
- Add and update restaurant data
- View overall statistics for all users and restaurants

### Messaging

- Moderate communication