

## Introduction

Arman: Hello, I'm Arman.  
Mary: I'm Mary.  
Jeffrey: I'm Jeffrey.  
Arman: and we are Foodies.

Arman: Our product allows users to save time, money, and compromise between a group of friends. We want to solve the problem of going out with friends and having a hard time deciding where to go to grab a meal. We solved this problem by creating an app where users can create events and invite their participating friends. Then the group of friends will see a list of restaurants based on the group's preferences and each person will vote for the restaurant they would like to visit. The winning restaurant will be the one we visit.

## Demo

Mary: [Opens two simulators]  
This is our login page.  
[Logs into a different account on each one]  
After logging in, the user will be able to see a summary of all the events they are attending and all the events they are organizing.  
[Click on an event]  
For each event, the user will be able to see the host of the event, and the list of people attending.  
[Click on different events to show the difference]  
[Click on vote for one event]  
Each event will have a corresponding list of recommended restaurants. Each attendee will then be able to vote for the one they prefer. The voting system is not quite finished: right now, users can vote for a restaurant and votes are recorded, but the voting period never ends.  
Users can create new events by clicking this button.  
[Click on create new event button]  
To create a new event, one has to fill in the name of the event, the desired relative budget of the event, and the emails of those attending the event.

[Enter name of event “dinner party” and choose budget 3]

Every time an email is added to the event, the app will check to make sure that the user exists.

The user can see their preferences by clicking this icon.

[Click profile]

On the preferences page, the user can tell the app how much they like or dislike a certain category of food by moving the slider. We talked about using a like, dislike, and temporary dislike system but we decided that it would allow for more flexibility if users could choose from a -10 to +10 scale.

And that’s it for the demo.

## **Remaining Work**

Jeffrey: One of the things we’ll need to improve on is our algorithm for generating recommendations. We have collected the data necessary to make useful suggestions, but this static data is not currently combined with user-supplied constraints such as budget, time, location, and personal preferences. In addition, many of the locations in our dataset are not places that someone using this app would usually want to eat at. We need to remove those areas from search results.

The voting system also needs to be completed. Currently, users can see suggestions for restaurants and vote for their choice of where to go eat, but we currently do not conclude voting by showing the users a definite location.

## **Technologies/Sources Used**

Arman: We used Flutter for the front-end of this app. We chose Flutter because of its advantages over React Native such faster startup and performance. Flutter also doesn’t need to be optimized separately for iOS and Android. Flutter is built on the Dart programming language which is object-oriented and has a clean syntax making it easier to learn.

Jeffrey: We used the Julia programming language to gather price and opening hours data from the Google Places and Yelp Fusion APIs as the language provides simple multithreading tools to process all 25 000 establishments in an efficient manner. We store all of our data in a SQLite database backed by memory for speed and quick prototyping. The backend is written in Node.js and hosted on Heroku, also for simplicity and quick prototyping.

## **Ideas for Future Development**

Jeffrey: Another aspect we would like to work on is a better way for users to know when they are invited to events and when upcoming events are occurring. We are considering using push notifications for this feature.

We would also like the ability to clone events as we often go out with the same friend groups and it is tedious to add emails to a new event every time.

On the topic of adding friends, there should be an easier way to add friends than trying to guess the email they signed up with. We are considering using QR codes or maybe NFC to be able to add people that are physically close by.

[Take questions]