**Technologies Plan**

**What is your target user base?**

Our target user base is younger, enthusiastic people who want to meet new people instead of staring down at their phones. We want to focus on big cities and urban areas as these places have the highest concentration of such people.

We can start with distribution to colleges, then expand from there once we get a fanatic following (ie like Facebook, Tinder).

**Do you want your project to be built with multiple technologies?**

Yes, every technology has upsides and downsides. This can also make it easier for people who are experienced in specific technologies to contribute, rather than having to relearn a new framework. Some of the functionality includes: Registration/Login, private messaging, natural language processing to match people more accurately, geo/navigation match locations.

**Do you want to work with languages and frameworks you’re familiar with or use this as an opportunity to learn new ones? Think about your project timeline as well.**

We want to use this as an opportunity to learn new languages and frameworks, especially react. Our project timeline allows for this. We can expand our comfort zone and find the very best technology for the job rather than rely on only our limited experience.

**Do you need to store data, and if so, for what purpose are you storing this data?**

We are going to use the Firebase Realtime Database to store data. We store location data (temporarily) to match users with each other. We also store interests to match people more accurately.

**Do you need to access data that is not directly accessible? (e.g. web scraping, APIs)**

We use the Google Maps API to let users know each others location. We also use a Google Calendar API to automatically schedule follow-up meets and send reminders. We use the Microsoft Cognitive Services API, specifically the text analytics to measure sentiment and schedule follow up visits.

**If you are making an app, does it have to be cross-platform?**

The app is going to work on both iOS and Android to reach the most number of users.

**What platform will your project run on? (e.g. desktop, web app, mobile, etc.)**

The platform will be a mobile app.

**Are there any interesting features specific to a certain technology that might prove useful for my design?**

React is a good option because it is fast and scalable. This would be important as the number of app users grow. It also has a Virtual DOM (Document Object Model) which makes updates really quick since only components of the Virtual DOM are updated rather than the entire Real DOM. We will also use the Google Analytics API to better understand customers and advertising ROI. Check average time spent on app, number of users, how many meetings per person.

Full Technology Stack

For our app, we will be using

* **React Native** because…
  + Make app cross platform (work on both iOS and Android)
  + Growing and helpful online community - useful if stuck
  + Scaleable and faster to update app (because of Virtual DOM)
  + Live preview
* **MySQL** because..
  + Strong Data Protection
  + 24 X 7 support from MySQL Enterprise
* **Firebase** because..
  + Send targeted user notifications
  + Real time database to match people
  + Crashlytics
  + In-App messaging
* **XCode and Android Studio** because..
  + Higher performance compared to React Native Apps
  + Once app grows, higher performance will be prioritized
    - However, use React Native in the beginning
* **Google Maps API/Nearby API** because..
  + Need it to find nearby people and guide people to locations
* **Google Analytics** because..
  + To measure user retention, growth, and enthusiasm
  + Measure advertising ROI
  + Extremely useful general data to create improvements in our products
* **Google Calendar API** because..
  + Find empty slots in schedule and automatically schedule follow up meetings with people you are interested in
* **Microsoft Cognitive API** because..
  + Use the text analytics to perform sentiment analysis on your review of the person to determine if we need to schedule follow up meeting and when
  + Match people based on similar interests
    - People with similar personalities may write similarly
    - Use to rank people based on compatibility