Scope and Limits.

For initial release of our application, basic core functions need to be working;

* Integration with a repository of recipes
* Ability for user to enter/scan ingredients to the app.
* Automatic search function based on available ingredients and user preferences.

The core functions also allow for better overall usability, especially on the Android platform. Given the number of devices and Android version currently in use, it will be difficult to create an App that useable across all devices with all functions. So, to increase the prospective audience, having a “base” model of the application with a more limited functionality given potential hardware limitations of the user's device, along with the “deluxe” version with all features included for newer and more advanced hardware/software is advantageous.

Updates to be pushed out soon after release would include ingredient detection using Image-Recognition, allowing the user to point their camera at the fridge to add ingredients to their app.

Tools and Technologies.

Hardware and software requirements:

Desktop or laptop computer with mid to high level components. For computers used by coders, a dedicated graphics card is not required. A fast CPU, i5/i7 or Ryzen 7/9, with at least 16gb RAM is preferable as the IDE can be system intensive at times. The Integrated Development Environments that will be used are Android Studio and SDK (Ver 3.4.2), which will run on Windows operating System, and Xcode for iOS development (Ver 10.3), which runs on macOS. To prevent the need for different operating systems within the organization, macOS will be run on a virtual machine using Oracle VM VirtualBox (ver 6.0). This software is free to use, even the enterprise edition. Version control will be handled by GitHub, with both IDEs able to interact directly with Git repositories, with a license fee per active user for enterprise use.

Testing

Both IDEs have built in emulators to ensure the application runs on the intended devices. This along with an invite/closed alpha/beta testing program will allows us to polish out as many bugs as possible before general release. The number of candidates for the alpha/beta program would be decided by the popularity of the product (when looking for testers) and the amount of staff able to process bug reports and user feedback. A manageable number, such as 50-100 users is probably well within the capabilities for our company.

Test users would be chosen based on a few questions:

* Age range
* Live alone or in a family/group situation.
* Current device in use
* If they cook enough times in a week.

This will allow us to gather feedback from a large variety of the population, We’ve left gender out as a question to avoid SJW numpties and the “REEEEEEES” it would result in.