**\*Please make a copy of this document and include this in your GitHub repository for your submission, using the tag #AndroidDevChallenge\***

**Tell us what your idea is.**

[***eatn***](https://github.com/thomasphillips3/eatn) *uses a trained TensorFlow model as an on-device solution. The hungry user takes a picture of the ingredients at their disposal, the app identifies them, and suggests recipes.*

**Tell us how you plan on bringing it to life.**

*Describe where your project is, how you could use Google’s help in the endeavor, and how you plan on using On-Device ML technology to bring the concept to life. The best submissions have a great idea combined with a concrete path of where you plan on going, which should include:*

* *(1) any potential sample code you’ve already written*
  + *I have forked the* [*TensorFlow Object Detection Demo*](https://github.com/thomasphillips3/examples/tree/master/lite/examples/object_detection/android)*, which will be used as a starting point*
* *(2) a list of the ways you could use Google’s help,* 
  + *I am an aspiring Android developer, teaching myself and learning on the job. I would like Google to provide guidance through the development process. I would like help dividing the project into manageable chunks, helping unblock me when I get stuck, and providing feedback on best-practices while creating a proof of concept/ minimum viable product.*
* *(3) as well as the timeline on how you plan on bringing it to life by May 1, 2020.* 
  + *I’m not completely sure of all the steps required, but here’s my estimation*
    - *Jan 1, 2020*
      * *Design user scenarios*
      * *Design an interface around the scenarios*

***Output****: Specification*

* + - *Feb 1, 2020*
      * *Train and deploy the TensorFlow model necessary to identify foods, maybe using a small subset initially (e.g. breakfast recipes only)*

***Output****: App can identify foods through the live camera or a still picture, and saves them to a list*

* + - *March 1, 2020*
      * *Use the list of foods to call a recipes API (e.g.* [*Edamam*](https://developer.edamam.com/edamam-recipe-api)*)*

***Output****: App displays a list of possible recipe matches*

**Tell us about you.**

I am a QA engineer specializing in Android. I am a self-taught coder with roots in the automotive industry and tech. I have been working very hard outside of work to gain the skills needed to put my own app in an app store. I am aspiring to become proficient in a stack consisting of Android for the front-end, and AWS or GCS as a backend.

**Next steps.**

* Be sure to include this cover letter in your GitHub repository
* Your GitHub repository should be tagged #AndroidDevChallenge
* Don’t forget to include other items in your GitHub repository to help us evaluate your submission; you can include prior projects you've worked on, sample code you've already built for this project, or anything else you think could be helpful in evaluating your concept and your ability to build it
* [**The final step is to fill out this form to officially submit your proposal.**](https://docs.google.com/forms/d/e/1FAIpQLSe43koQL33IzgxXQl29Ex3AhFuqd4hQzxLiXREqwRkDGtx1vA/viewform?usp=sf_link)