

Tell us what your idea is.

Describe in 250 words what the feature or service will do and how you'll use Machine Learning to push the bar:

Our idea is all about the elderly. We are working on an application that will help older people with using Android, enhancing their user experience. We are using ML technology to detect our user's emotions while using certain applications and help them if they are feeling stuck. Let's say a user wants to call their grandchild. They open up the call app on their phone but don't remember the phone number, so they have to find it in their phonebook. This can be a problem for many elderly users, and when our emotion recognition algorithm detects they are having a hard time, it suggests a few solutions to them, eg. open the phonebook and select a contact, with steps of course.

Additionally, the app learns what actions the user performs the most and suggests useful shortcuts. As mentioned in the feature description, ML technology will help us classify user's emotions and to act accordingly. It will also be used to learn about the user's habits to suggest simple and effective shortcuts.

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,
- (2) a list of the ways you could use Google's help,
- (3) as well as the timeline on how you plan on bringing it to life by May 1, 2020.

Our project is currently just an idea we have been planning to build. The features we are implementing are complex and need to be carefully planned beforehand so we didn't want to rush into coding itself.

How we could use Google's help:

- Developing ML technology to detect people's feelings based on facial expressions is a complicated issue, and one Google could help us with.
- The application will have to be very fast and power efficient
- Google could help us try to find the right approach for developing the application as well as help with the development itself



Our timeline:

- Now January 31st
 Developing ML models that will perform emotion recognition
 Developing ML models that will learn about the user's habits and frequent actions
 Collecting data for suggesting helpful tips to users
- February 1st March 31st
 Developing the rest of the Android application
 Finalizing the designs and user experience
- April 1st May 1st
 Testing the application
 Performance and other improvements
 Bug fixing
 Deployment

Tell us about you.

A great idea is just one part of the equation; we also want to learn a bit more about you. Share with us some of your other projects so we can get an idea of how we can assist you with your project.

We are a group of college students and development enthusiasts from Ljubljana, studying at the Faculty of Electrical Engineering and the Faculty of Computer Science. Our main focuses are Android and web development and now we are up for a new challenge - upgrading to the ML world. We worked on a couple of projects together before and also competed at two bigger competitions; Google Hashcode and Dragonhack, a hackathon here in Ljubljana.

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.