Tell us what your idea is.

Oratory Helper is an app that aims to help people improve their public speech skills. Many people struggle when speaking in public, so the app will record a user while they rehearse a presentation or speech and provide tips and feedback on how to improve.

Some of the things the app will do:

- Notice if a user is repeatedly saying a word
- Tell the user if they need to raise or lower the tone of their voice.
- Tell the user how clearly they're speaking.
- Provide a summary of their presentation.
- Provide general tips on how to improve their eloquence.

The app will use voice recognition to translate the user's presentation rehearsal into text, apply sentiment analysis to determine the tone of their presentation and also extract a summary. If the user desires, the app can capture pictures of their face while they rehearse to provide insights into their emotional state and at the end of the rehearsal, they'll be able to see how their emotions changed during the presentation.

Tell us how you plan on bringing it to life.

The project's development has not started. It's currently in the conceptual phase.

I could use Google's help for the following:

- Integrating a speech recognition, speech to text, model via Tensorflow Lite, since the SpeechRecognizer API is not suitable for continuous recognition, per the documentation.
- Acquiring data for and training a model to provide the required functionality that is not currently provided by existing models.
- Recognizing patterns in the user's speech transcription that could be associated to areas of improvement in their eloquence.

Project's timeline:

December 2019: Research existing speech recognition, speech to text, idea extraction and sentiment analysis models, in order to learn about their capabilities and limitations. Build a simple UI for the app.

January 2020: Integrate speech to text model into the app, store speech as text file.

February 2020: Implement word count functionality to search for words that are repeated often. Create filters to ignore common words like "the".

March 2020: Initial testing phase. Integration of idea extraction model that will be used to create a summary of the presentation. Integration of sentiment analysis model.

April 2020: Implement data extraction from the speech's text transcription in order to provide tips on how to improve the user's eloquence. Polish the UI, final round of testing and publish the app.

Tell us about you.

My name is Jorge Salas and I've been an Android app developer for about 5 years. I've also recently developed an interest in Machine Learning so I've taken online courses on this subject (See the course's certificate of completion here).

I've worked on a banking app called "Banca Móvil" which is currently available in the Google Play Store here. I've also worked as a freelancer for Toptal (see my profile here) and I'm currently working as an Android Developer for Trusona. You can find our app in the Play Store too, by following this link.

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.**