



Tell us what your idea is.

Let's imagine you visit Library in your area. You pick one book, choose favorite seat and read the physical book. Boring? Maybe. But it's a normal step to enjoy book in Library and other place. Why we don't try to download e-Book or audiobook? Simple. Not all of your favorite book will available on that version. Have you think about "How we can listen what book we read?". That's why I want to develop **ListenMyBook**.

ListenMyBook is Android App that give user different experience when reading book using power of Machine Learning. Every user who using this app will have to take picture of book page and can listen what content of the book. **ListenMyBook** also give possibility to convert book page content into any language and listen the voice easily.

How it works:

- Take Picture of Book Page
- If you need to translate, pick target language
- Listen the Voice of your content

Tell us how you plan on bringing it to life.

1) Any potential sample code you've already written

I just work in **ListenMyBook** project that everyone can monitor here:

<https://github.com/wdharmana/ListenMyBook>. ListenMyBook built with Kotlin language and some platform by Google, such as:

- **MLKit On-Device Text Recognition**
I use it to identify text that contained in image of book page
- **MLKit On-Device Translation**
offer user option to translate text from image
- **Google Cloud Text to Speech**
convert text from book or translated text into voice
- **Firebase Auth**
User can login / register with Facebook / Google Account to manage their collection



2) a list of the ways you could use Google's help

- a. Mentoring about how to recycle generated voice and available offline without call Google Cloud TTS API frequently
- b. I need help from Google about how we can use Machine Learning to identify and group book page that another also read. I think it will make it efficient to generate the voice.
- c. On development phase, i predict will hit Google Cloud TTS API Frequently. Free Quota for Google Cloud TTS will be help for me :)
- d. Mentoring about how we can monetize Machine Learning App, especially in my case.

3) as well as the timeline on how you plan on bringing it to life by May 1, 2020

Here the development plan for **ListenMyBook** project:

December, 2019

- Design UI/UX for Mobile App
- UI/UX Implementation for Mobile App
- Third Party / Platform Initial Integration

January, 2020

- Pick Picture from Camera
- Get Text from Camera with MLKit
- Translate Text into Specific Language with MLKit
- Convert Text into Voice with Google Cloud TTS

February, 2020 [until Mid]

- Authentication with Google Sign In
- Manage Collection
- Improve Offline-First Listening

February, 2020 [Mid] - March, 2020

- Mentoring session and get feedback from Mentor
- Get user feedback with *user acceptance test*
- Release to Public

Tell us about you.



Hi, I'm **I Wayan Dharmana** or you can call me **Wayan**. Android Developer based on Bali. Colony Labs is my company that focus on Mobile App Development. I started coding from Junior High School and today i'm focus on Android Development. I Just finish my bachelor degree of Computer Science in STIKOM Bali, Indonesia.

This is some of our work on Android Development

Dokter Tani (<https://play.google.com/store/apps/details?id=com.colonylabs.doktertani>)

- Application that help farmer to detect disease with chat bot and also MLKit. This application is winner of Google Developer Challenge Indonesia in 2018.

Games Connect (<https://play.google.com/store/apps/details?id=com.colonylabs.gamesconnect>)

- We support Asian Games 2018 with Games Connect. This application is winner of Digital Challenge 2017 by Ericsson Indonesia & Ministry of ICT Indonesia

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.](#)**