



## **Tell us what your idea is.**

*Our idea is to help blind people by solving one of their basic problems of reading. Blind people often use Braille text for reading. It involves blind people to touch each letter to recognize what that letter is, in this way, they will read the whole sentence to understand the meaning of it. We know this is a time-consuming process, and we want to provide some help here using the technology. We are planning to create an Android application that scans the Braille printed paper and understands the Braille letters in it, and then it converts this Braille letters code to a particular speakable language format(example English). Once it's converted to a proper speaking language we convert the text into the audio, so that the blind people can hear the content of Braille printed paper directly. We hope this technique can solve the pain point of blind people in reading. We have to solve two technical problems here:*

- (1) Understanding the Braille letters from Braille printed paper when scanning it.*
- (2) And converting those Braille letters into a speakable language format.*

*We are planning to do research and use one of Google ML kits to scan and understand the Braille letters from Braille printed paper. Also, we want to use ML features in converting the Braille letters into speakable language format.*

*Note: When we say Braille Printed paper it's not just text print in a paper, it's the dots made on a paper with the Braille pad.*

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

*Our project is actually in the initial state and about to start with the development. We have decided what our application gonna be and its features.*

*Following are the features that we want to build:*

- (1) Ability to scan and understand the Braille letters from Braille printed paper.*
- (2) Ability to convert the Braille letters into a particular language format.*
- (3) Ability to convert that text into audio, which can be used by the blind the people to here directly.*
- (4) Ability to create a Braille letter print model which can be directly shared with a Braille printer from Android application, so that Braille printed paper to audion and vice versa conversion can be achievable (Future plan - this feature may not be in the version of May release).*



*Following are places where we think we could use Google features:*

- (1) Using On-Device ML technology for scanning and understanding the Braille letters from Braille printed paper.*
- (2) Using Google translators/ML/other open-source projects for converting the Braille letters to particular speakable language format.*
- (3) Google text-to-speech for converting the text into the audio.*

*Following is the timeline plan, we want to follow for building this app.*

- (1) Doing the research(POC) and deciding which Google ML feature perfectly fits to solve our problems – in December & January.*
- (2) Creating the Android application – in February.*
- (3) Performing the real-world testing in the first half of the month - March.*
- (4) Taking the feedback from testing and completing the full development by the first half of the month - April.*

## **Tell us about you.**

I'm a software developer with 3.5 years of experience. Currently working in a startup, and here I work on Android and Backend(Python) technologies. I like to solve real-world problems with technology. I feel I'm a quick learner.

Following is the technology stack I'm comfortable with:  
Java, Python, Android, Firebase.

Projects:

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### **EazyPG:**

Following are the apps, I've developed personally for people who stay in PG's(Paid Guests):

<https://play.google.com/store/apps/details?id=com.notfound.eazypg> – For the Tenants.

[https://play.google.com/store/apps/details?id=com.notfound.pg\\_owner](https://play.google.com/store/apps/details?id=com.notfound.pg_owner) – For the Owners.