Tell us what your idea is.

Integration of Android and Machine learning has been found to be very interesting. I have tried to integrate the firebase ML-kit's TextRecognition Api from Vision with my android application. The main idea is to extract text from images. The users can click images or get it from gallery and extract the texts from those images. Those texts can be copied and pasted anywhere. We all have come across a situation where we want to extract the text from images and use those texts, whether to save it somewhere or to search the texts online. This app can help solve the problem to some extent.

Tell us how you plan on bringing it to life.

A sample project has been made in order to proceed to the idea.in the link below :
https://github.com/Ushnesha/TextRecognitionAndExtraction
- The project uses BottomSheet.
- The main activity has an image view and a camera button.
- On clicking the button, Crop Image Activity opens.
- The user gets to choose from where he/she want to use the image. After cropping the image, the image will be set to the main activity's image view.
- After it gets the cropped image, the bottom sheet expanded and the text will be extracted from image into the text view.
- This has been done using :
    - FirebaseVisionImage to get the image,
    - FirebaseVision.getInstance().onDeviceTextRecognizer to process the image
    - FirebaseVisionText to get the image.
- The text in the textview is selectable and so user can copy the text.
- The copied text can now be used anywhere - to save it somewhere in notepad or to search it online for any query.

Since only a sample app has been developed, that only extracts the text, till May 1, 2020 it will be in fully developed phase with new features such as auto nsearch or auto saving text will be implemented and will be ready for release in Google Play store.

Tell us about you.

I am a final year student at ABV-Indian Institute of Information Technology and Management, Gwalior, Madhya Pradesh, India doing integrated B.Tech+M.Tech 5 years degree course. From my sophomore year, I started doing Android Development and I kind of liked it. After a few months of developing, Android Development had become my passion and decided to have a career in Android Development only. I have followed almost all the courses in Udacity and also am an Advanced Android Developer II Nanodegree scholar. I have done a lot of mini projects in Android using Java as well as kotlin. Currently I am brushing up my android jetpack skills to escalate my career opportunity. Some of my project repositories have been uploaded in github link : https://github.com/Ushnesha

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.**