Please make a copy of this document and include this in your GitHub repository for your submission, using the tag #AndroidDevChallenge

Mobile phones are replacing bank accounts in Africa thanks to the emergence of mobile money which has driven financial inclusion to the population that remains unbanked.

Even if people can send, receive or withdraw money instantly, the experience is still very hard mostly to illiterate and innumerate users; because mobile money users have to dial a USSD code then follow more than 5 steps to complete a transaction, if a mistake is made during the session lets say the user entered a wrong beneficiary mobile number, he will have to cancel the session and restart the operation again from start. This becomes frustrating when mobile money users want to withdraw cash at mobile money kiosks, they have to wait a long queue before they get served because the process is too long that the mobile money agent is not able to serve his clients quickly, sometimes the agent also helps other clients to initiate the withdrawal process.

My idea is to provide an Android App with a simplified and intuitive user experience which will allow users to scan the mobile money agent number visible on a display, leveraging the power of text recognition or barcode scan of the vision ML Kit to extract the mobile money agent number then paste it at the required step during the withdraw process. This will allow mobile money agents to serve many users in a short period, it will also allow users to make transactions smoothly and fast.

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

Tell us how you plan on bringing it to life.

The initial version of the app has been already published on Google Play (bit.ly/Eskke) This uses Accessibility Services to simplify and visualize complex USSD-based processes mostly for illiterate and innumerate users so that they can make transaction fast, the app has now more than 300 monthly active users and 100 downloads on google play, the plan now is to add a feature that will allow the users to withdraw money quickly, with the help of text recognition and barcode scan of Vision ML Kit, that is why I would like google to :

- Guide to make ML KIT perfectly work offline on low-end Android devices
- Provide mentorship about Machine learning and experience different user case on mobile devices.
- Showcase the application on google play

Timeline

1. **December 2018 - January 2019:** Learn deeply about Machine learning Kit
2. **February 2020:** Implementation of text recognization and barcode scanning from the Vision ML Kit
3. **March 2020:** Run App's beta test
4. **April 2020:** Fix bugs received from test feedback and deploy the app on Google play

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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.*

Tell us about you.

I am an Android developer based in Goma, in the Democratic Republic of Congo passionate about building user-centred and useful apps, last year I participated in the

Google Africa Scholarship facilitated by Andela this equipped me with the knowledge of building android apps following the industry standard, this year again i am in the same program now as a mentor. I am also driven by the desire of sharing knowledge and making it accessible to as many people as possible, I am doing so by translating English tutorials into French (blog) and speaking at GDG meetups.

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.

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.**