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

Tell us what your idea is.

The android app Eyes is an application which main purpose is to provide eyes to those who can't see. With ML and object detection this project should be able to help blind people overcome daily struggles when heading out. Ideally this app would be great if it could be paired with glasses having built-in cameras so the app could use these as real eyes. My idea is to add an object recognition and movement recognition to detect objects like cars, another example would be recognition of crosswalk or obstacles in a way. I can think of many situations which can be really dangerous to blind people like electric cars, some construction happening on the way person usually use, etc. For start the app would only support phone built in camera where user would have to point the phone to specific direction. The app would have voice control feature so user can say what the app should focus on for example "find any obstacles". Another extension which could be added is the text recognition and TTS when the phone camera is pointed onto a building or other object. For the first version of the app it would be likely a limited functionality as this can be quite robust project. At first I would like to focus on obstacle recognition and moving objects recognition which would trigger a warning to the user. Part of this project would be also acquiring feedback from blind people if this would make any sense to them. The app can't distract them by being too "loud" on the other side the app should help them to see things which doesn't make any noise.

Tell us how you plan on bringing it to life.

The project Eyes is currently in the initial phase as I am just trying to figure out the usability and main control for the app. Before starting any coding I will be gathering feedback on the main features.

1) No sample code yet.
2) A list of the ways you could use Google's help:
    a) Some guidance in object detection, movement detection
    b) Guidance with voice control feature

c) Best practices for working on accessibility features
d) Best practices for battery usage while using voice control and camera for object recognition

3) Timeline: After gathering feedback in January I would like to start working through the main idea implementing simple object detection, then adding a voice control and iterating on these. As far the UI goes the app doesn't need to have any visually plausible features rather will focus efforts on UX. The goal would be to have MVP ready at the beginning of April.

Tell us about you.

My name is Pavel and I currently work as Android Lead developer for company Tutela Technologies out of Canada. In my full time job I am working on Analytics SDK fo which is deployed on millions of devices all over the world. Although I mainly work with SDK project I have several apps which are available on my GitHub profile. I love learning and especially love to learn new things from the world of android. I would describe myself as hard worker which is focused on achieving the goals while also enjoying life with my family on the other side. I believe in power of technology and my purpose is to help people move forward through tech innovation.
My GitHub: https://github.com/Pavel87?tab=repositories

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.**


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