VISION - an AI voice chatbot based social media platform and assistant for the visually impaired

**Theme:** Assistive Technology

**About the idea**

In todays world, almost every person is on the social media.

"There are now over 3 billion social media users in the world — about 40 percent of the global population" -Mashable India

This is because of the enormous potential that social media carries in connecting people. People from different corners of the world are brought together by the 'social network'.

But there is a problem. These social media applications are built specifically to serve for audiences who visually fit. This is where the blind folks miss out on the vast opportunities on social media. And to solve this very problem, our team will be building our revolutionary social media application for our visually impaired friends. Presenting,

**VISION - an AI voice chatbot based social media platform and assistant for the visually impaired**

Vision is a complete package. To explain to you what we mean by that, lets talk about a revolutionary device that has changed the world for good. **Smartphones**

Smartphones are everywhere. Everyone has one. Some even have two. This technological marvel has dominated the world and we don't see the growth in smartphones users stopping anytime soon.

But here lies the problem again. These devices are built only to be used by visually sound users. Imagine if you were to text your friend or post a status update with a blindfold on. Would you be able to do it? Ofcourse not. This exact same problem is faced by people who cannot see. Such people are missing out on the technology that has changed the world. And nothing has been done about it. *Yet.*

Vision aims to allow its visually impaired users to use their mobile devices to their fullest extent. Apart from its primary focus of being a "**social network for the blind**", our vision is to make Vision a full fledged operating system for all mobile related tasks to be used by blind people. Be it texting someone, setting an alarm, searching the web or calling a friend, playing a song or setting a reminder, Vision's intelligent voice chat assistant does it all. Just pressing the power button leads to a black screen, which touched anywhere wakes Vision up. The assistant then listens to the users commands and performs tasks accordingly. Users can also use it for finding thier phones where the person says "*Find my phone*" and the device starts ringing. Its all voice based request and response. No eyes required.

But that is towards to later stages of the application. Initially we focus only on the social media aspect of Vision. Vision initially would be built as an mobile application (voice assistant built on\*\* DialogFlow\*\*). The app would keep running in the background in power on state. Saying "Hey Vision" would trigger the application. The UI of the application is an empty black screen. That's it. Touch anywhere on the screen and Vision is ready to take your commands. The users can then listen to posts based on categories used to pander the user's interests, send messages, post status updates, make new friends and chat with them, listen to news, listen to audio books etc. The possibilities are endless. For posts, message replies and audiobooks, the voice assistant reads out the text at a pace the user is comfortable with.

The question that arises here is - **Where does all the content come from?**

This is where the other aspect of Vision plays its role. Vision aims to build an online community where visually fit people can contribute for the knowledge enrichment of the blind. Contributions can be made in the form of screenshots of various posts, photos of books and ebooks, images with text etc. which would be made into audio books, audio posts etc. Our\*\* OCR system\*\* would retrieve the text from these contributions and convert it into audio using the **Web Speech Sysnthesis API** to be read out by Vision. Other social media platforms can also extend their collaborational support by adding functionality such as "*Share to Vision*". Now, people who cannot monetarily help those who cannot see, can do their part of charity by sharing their knowledge. This would open up a whole new aspect of social work, **Knowledge Enrichment of the Disabled**.

In fast paced world, advancing such rapidly with technology, let's help our visually impaired friends to move away from orthodox methods like Braille and onto Vision.