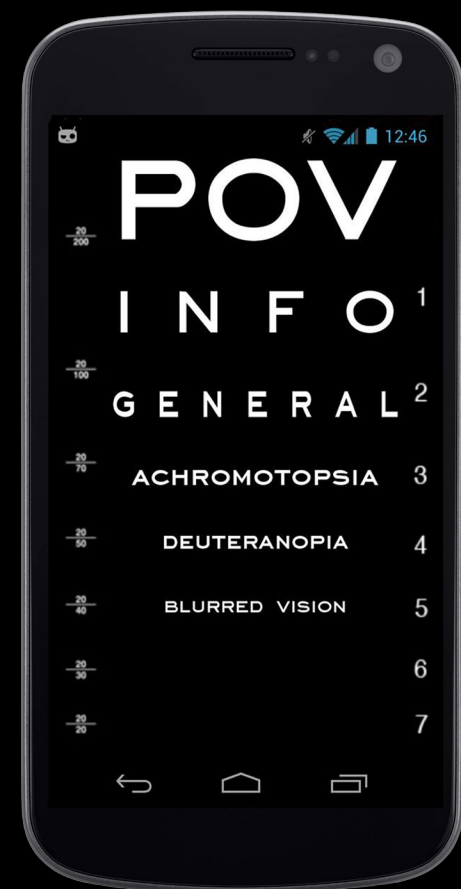
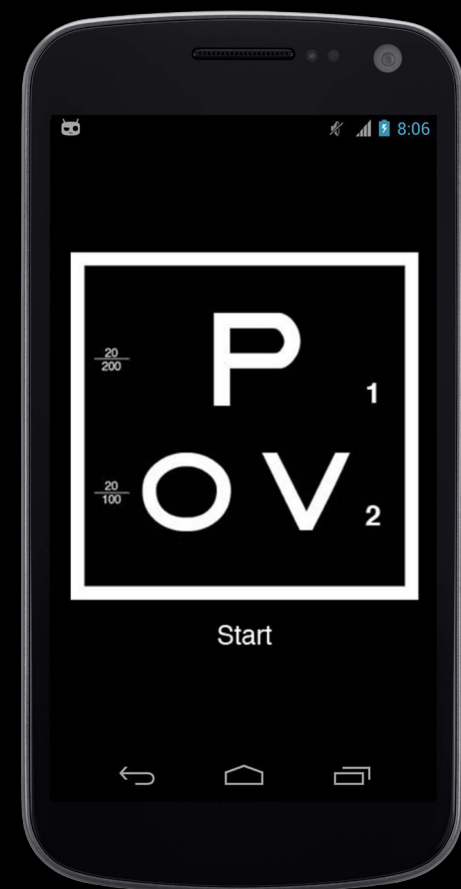


See Another Point of View

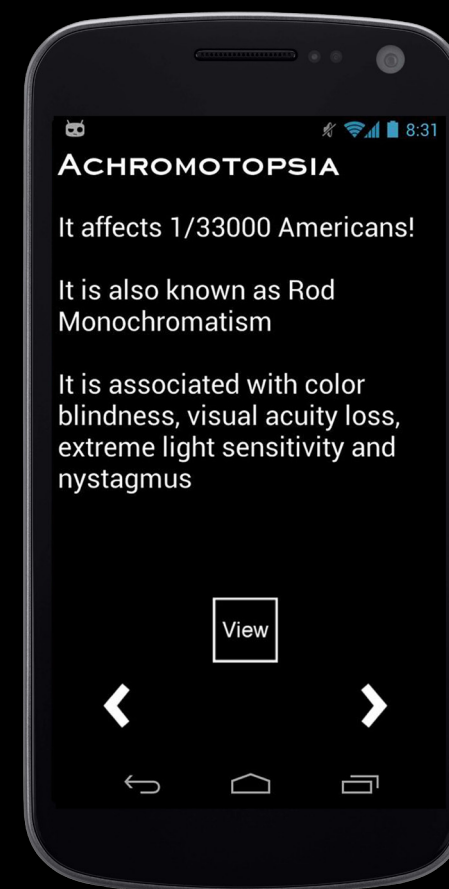
By Mark Goldberg

POV focuses on education. It is common when informed of an individual's visual impairment to have a natural curiosity. This curiosity can be expressed in the nature of questioning or confusion. POV hopes to break down the barrier and allow for individuals without visual disabilities to understand and experience daily life for these individuals. This element is accomplished through the use of the phone camera. This allows for the live updating element that allows the user to interact with the world around them. Visual stimulation is a powerful educator and it is often through this representation that understanding is achieved. The other key elements of the application are availability and portability. Smartphones are highly prevalent in society and as a result, this application has the potential for a wider audience. Finally, curiosity can strike at any moment. Whether through a conversation with an individual with a visual impairment, or just a thought, the application is readily available to satisfy any curiosity.



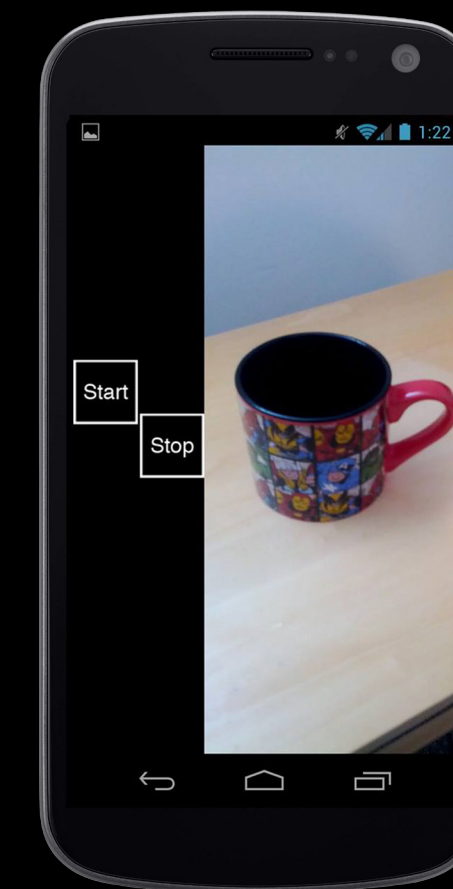
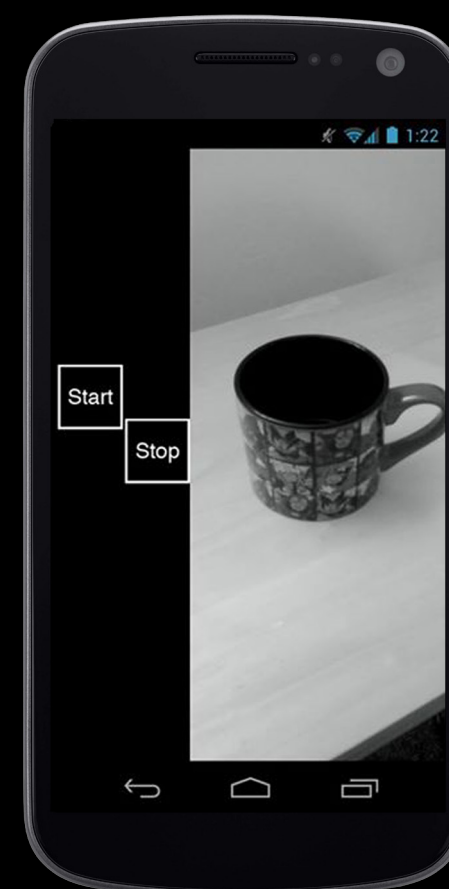
Menu

The menu has three main categories. The first category is the general app information. Atop the chart is a link to the general application information. It provides some information about the key reasons behind the app as well as developer information. The other key component of the menu is a general "normal view" information page. This page provides an initial understanding of the process of vision as well as a connection to the regular camera features. This just provides an initial baseline and a base feature. The final feature of the menu screen is the link to the different visual disabilities. Each of these is separately linked to their own page, providing information about the impairment as well as a link to the camera that provides a "view" of what this looks like.

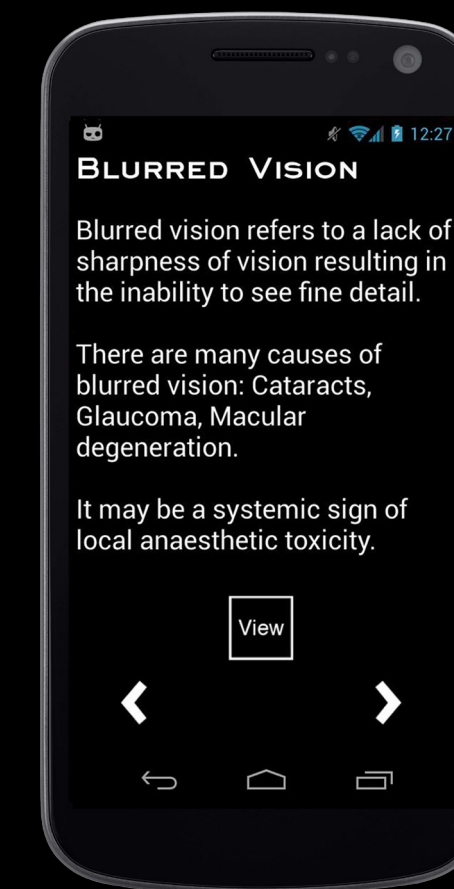


Achromotopsia

Achromotopsia affects 1/33000 Americans. An individual with complete Achromotopsia sees only black, white and shades of grey. The other commonly used term for Achromotopsia is Rod Monochromatism. Achromotopsia is heavily associated with color blindness, visual acuity loss, extreme light sensitivity and nystagmus. When the 'View' button is pressed, the user immediately enters the screen mode where they are able to get a better visual understanding of the visual impairment.

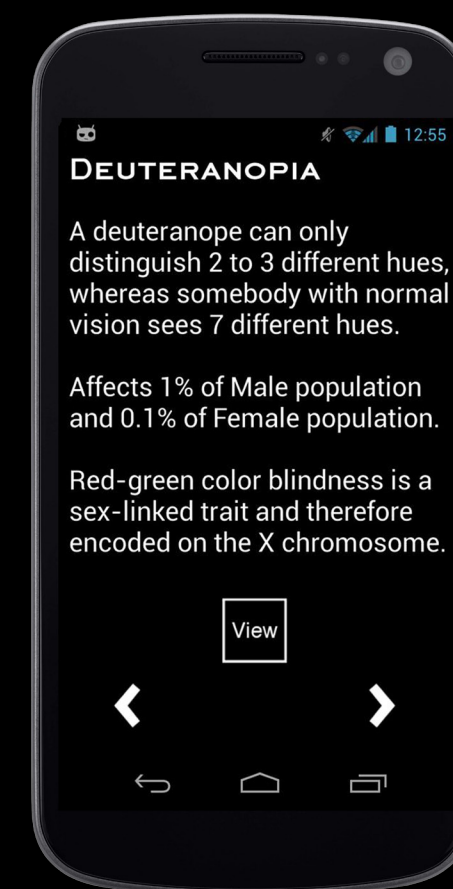


General



Blurred Vision

Blurred vision refers to a lack of sharpness of vision resulting in the inability to see fine details. There are many different known causes of blurred vision. These include Cataracts, Glaucoma and Macular degeneration. Finally, blurred vision may be a systemic sign of local anaesthetic toxicity.



Deuteranopia

A deuteranope can only distinguish 2 to 3 different hues, compared to an individual with normal vision who is able to distinguish 7. Deuteranopia, as with many forms of color-blindness, is more prominent in the male population compared to the female. Statistics indicate that this condition affects approximately 1% of the Male population, while it affects 0.1% of the Female population. This is due to the fact that red-green color-blindness is a sex-linked trait that is encoded on the X chromosome. As females have two X chromosomes and males only have one, a male will only need one affected chromosome in order to have the disease.

Future Additions and Process

Many possible additions and updates are available for this application. The goal is to include and properly implement as many visual impairments as possible.

An evident, and ever-looming difficulty with an application of this nature is accuracy. It is heavily reliant on descriptions and ideas of what the visual impairment might look like, however it is impossible to provide a completely accurate view. Therefore, the application acts as an aid and an informant, but not a completely reliable representation. Future editions will constantly be changing, improving to provide better views and provide the user with the most accurate experience possible.

