Interactive Simulation WS 15/16
Project Proposal

EYES - Exchange Your Vision Simulator

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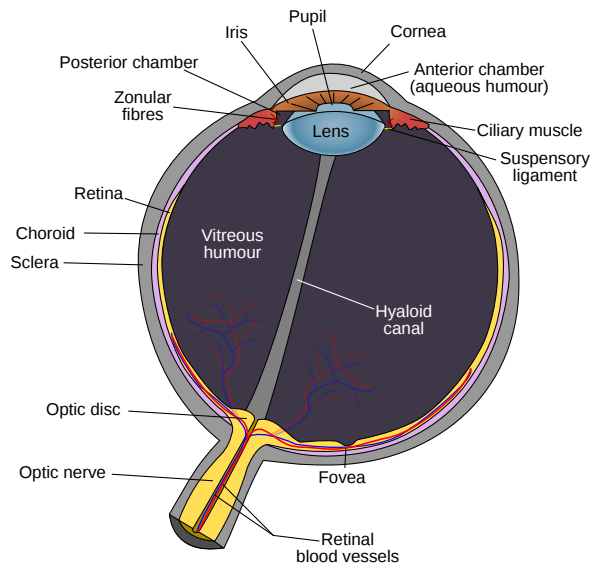
Figure 1: Scheme of the human eye.

Myopia/Hyperopia Commonly known as nearsightness and farsightness respectively.

Kreatoconus Cornea shape converges to cone
Multiple ghost images! (chaotic pattern), blurry vision, visual acuity at all distances, poor night vision photophobia, eye strain
No to little pain
Differently strong in both eyes

Nyctalopia/Hermalopia High difficulty to see in relatively low and bright light respectively.

Retinal detachment/Posterior viterous detachment Flashes of light, very brief in the extreme peripheral region.
Sudden increase in the amount of floaters.
Slight feeling of heaviness in the eye.

4. TIMELINE

1. INTRODUCTION/MOTIVATION
2. CONCEPT
2.1   User Experience
3. PROJECT REQUIREMENTS

Glaucoma

Cataracts Blurred vision especially in the center region.

Diabetic Retinopathy Black spots in the view

Color blindness Some colours appear undistinguishable.

Achromatopsia (Almost) No color sensitivity at all.