Image Processing Software Assignment

Introduction:

   On this assignment an image detection system that tracks the pupil and the iris of a human eye shall be designed. System will analyze a video feed and highlight centers and perimeters of the pupil and the iris. Detailed specifications of the system will be explained in the following section.

Specifications:

- System shall accept a video feed or a still image.
- Inputs to the system shall contain the whole eye. A reference image will be provided in this document.
- If a video feed is passed, a modified video feed shall be saved as the output of the system.
- If a photo is passed, a modified photo shall be saved as the output of the system.
- System shall be coded in C++ or Python Programming Language.
- Any image processing framework or method can be used to analyze the videos/images.
- A presentation shall be made to explain the solution architecture, any assumptions that are made and justify the methods that are used. The presentation shall also contain areas where the project can be improved.
- Any hardware can be used on the system as long as justification is made.

Submission Details:

- Deadline for the submission is January 31st, 2021.
- Submission shall contain the source code, presentation, test images/videos, and any build tools that are used.

Reference Image: