Report 2

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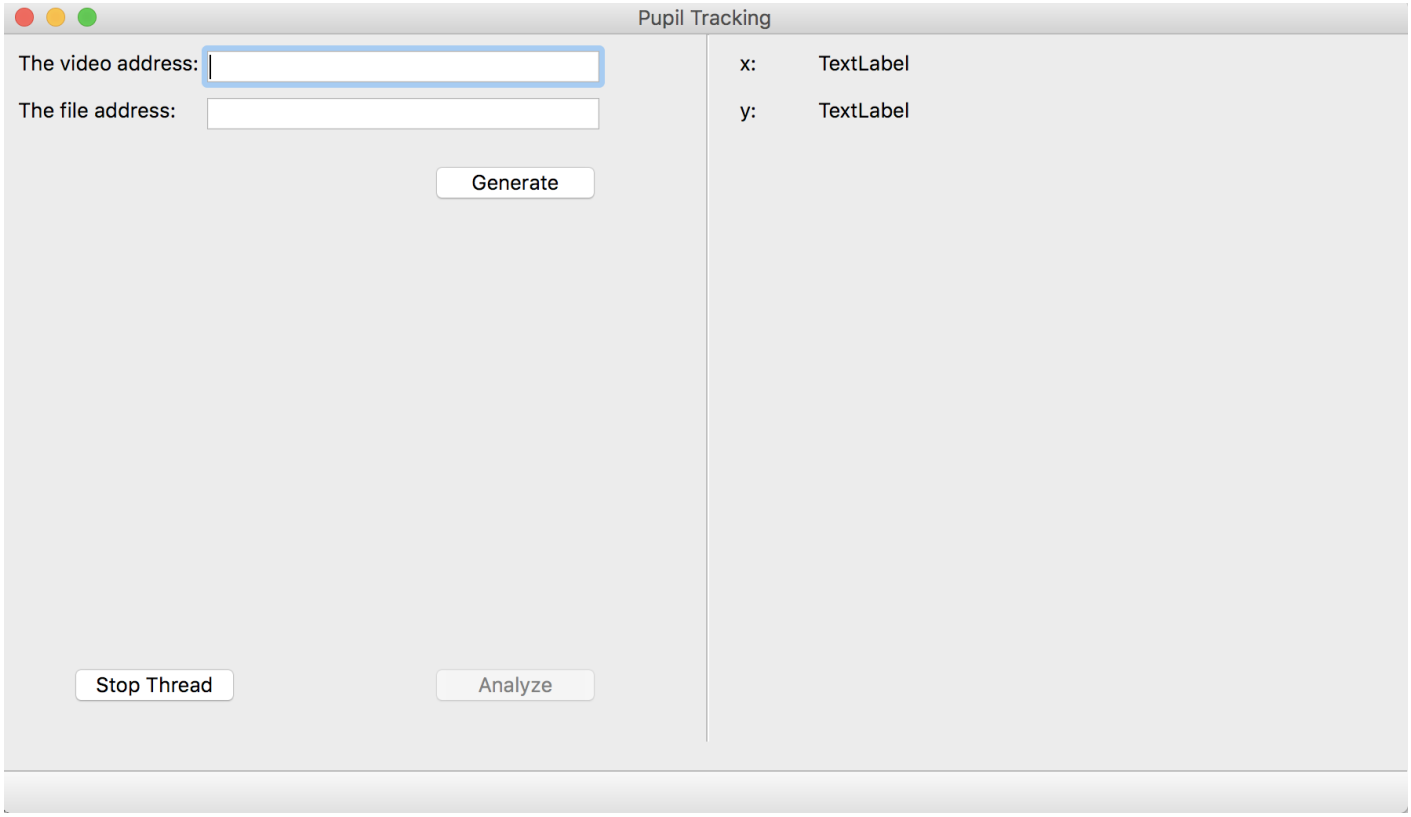
Objectives achieved this week

- Setting up the user interface.
- Enabling user-selected image-space to increase run time efficiency by scanning less space.
- implementing multi-threading to increase run time efficiency.

Objectives for next week

- Read the data input from the data file.
- Contextualize the data from the data file.
- Correlates the video and the data.

Results Demo

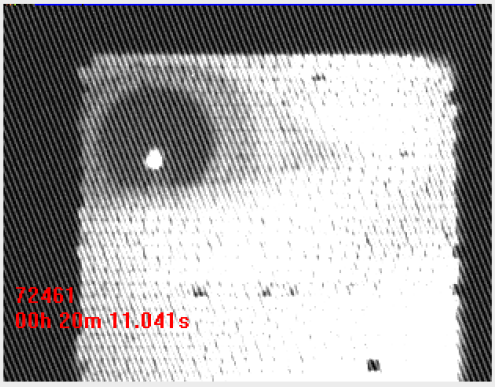


Pupil Tracking

The video address: image.png

The file address: file.txt

Generate



Stop Thread

Analyze

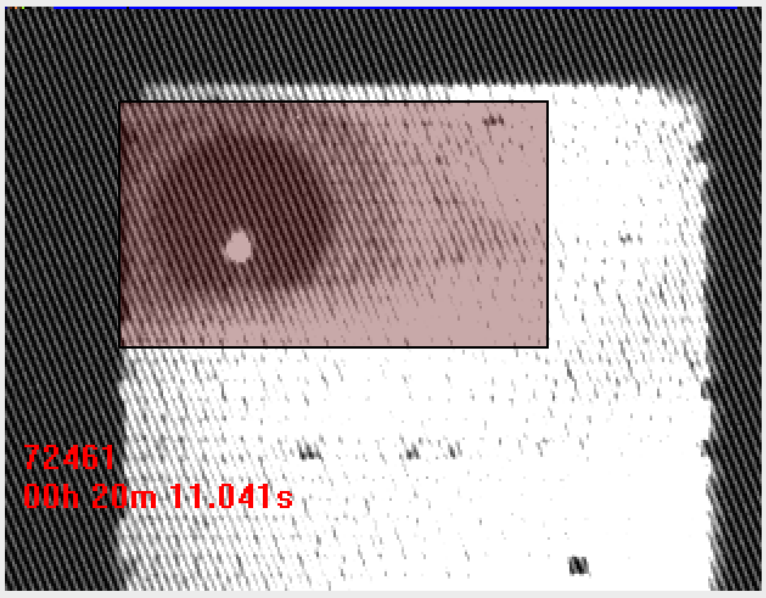
x: TextLabel

y: TextLabel

The video address:

The file address:

Generate



Stop Thread

Analyze

x: TextLabel

y: TextLabel

Explanation

"Video Address" and "File Address"

-user inputs, which also have self-check functions to see if the files exist.

"Generate button"

-generates an open-eye picture for users to select as well as creating another thread in the background to output all the video generated pictures to the output file.

"Analyze button"

-Crop the image by the user-selected portion(Marked by the red rectangle), and run the image processing algorithms on it.

"Stop thread button"

-Stop multi-threading(in case the results are wrong)

"Space on the left"

-Wait after completing the image-processing part.

Conclusion

User Interface is half-completed. However, challenges remain on how to update displayed pictures in real-time so that users could watch the whole process of image processing and terminate it when necessary during the analysis process.