CS-2920

Assignment 4

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As the video progresses, the Blobs get updated (using a variant of the Connected Components approach). As the blobs get updated, there are methods working out what the new label should be and where it should be placed (in one version, this is happening in a Class that implements Blob, in a different one, this happens in a separate class and is imported in, though both use the same principles to determine the location. The identifiers are also developed differently. As the Blobs are updated, the original code simply asks for (and receives) the updated labels as the video progresses. The Blobs are labelled from a counter, so each Blob (starting with the first one formed) will simply have the number assigned based on when the Blob was created in the variant of Connected Components. Throughout the video, some Blobs will retain their numbers, while others change due to movement in the video. When the video cycles through (assuming no change in Threshold) the number of a blob will be the same at that point in the video cycle (image 2 of the cycle 1 should have the same numbering as image 2 of cycle 53, for instance). This may be altered as the program is altered. We may have it so that a number is linked to the previous frame's centroid (so the Blob containing that pixel will contain that number and if a Blob is formed that doesn't have a centroid from a previous frame, it will simply get a new number. A blob in this fashion would simply accept one – probably the last – of the available label numbers if it receives more than one). This could be easily arranged with a new Array. With the Blob in an array checking the label array to see if it has a label. The same could be done with Colour.