

Assignment 4 Plan

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processFile() : first we read the file and store all the point in **map**(2D array of double). And then with a breadth first search, we store each point into appropriate **blob**.

bfs() : This method does the breadth first search and fill the blob.

getRawImg() : we return the **map**(2D array) as it as.

getColorImg() : create a 2D int array filling it with corresponding blob color and return it.

check() : is to check if the point is inside the threshold and also inside the bound of the array.

getBlobs() :We have two list that store blob. One holds the blob of current frame and another holds the blob of previous frame. Each time we check if the current blob is part of the previous blob by calculating the distance between them. If the distance is more than 10, then they are different and has different label. Otherwise, we take the previous blob label and set that to new blob's label. And at last, we return the blob.

We have another class which implements the **blob** interface. In there, we override all the method as well as a method **addPoint()** which helps us calculating the centroid later.

