# Meeting Note

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Project: E. coli bacteria image segmentation

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## Discussion summary

1. Getting familiar with the problems and objectives of the project: To identify the area of bacterial and if possible to count the number of bacteria. We may start from an interactive solution, and ultimately achieve the fully automatic bacteria image segmentation and counting.
2. The basic flow of the project: Given an image, a mask can be applied to it to get the data of the area of the dish. After that, there are some works related to feature engineering to extract useful features. Next, based on these features, the result area can be identified through some image processing method or machine learning method such as K-means clustering. Finally, we will consider how to count the number of bacteria. The implementation details and further refinement will be discussed later.
3. The development tools needed: MATLAB, especially its Image Processing Toolbox.

## Next meeting targets

1. Prepare for implementation
2. Literature Survey
3. Discuss the problems encountered during the next two weeks

## Literature Survey

Not yet.