CHAPTER 5
CONCLUSION

Based on the test results of the guava fruit maturity classification project, the following conclusions were obtained:

1. The RGB average value obtained is not for the whole image but in the cropping area at the center point of the image which is calculated pixel by pixel in that area.
2. Guava fruit data can be classified by the LVQ method, the more exercise data will affect the results of the test data.
3. The level of lighting and image retrieval of guava fruit can affect the classification, especially if the image is dark and too far away will affect the results of image processing.
4. The variety of guava fruit used is the red brittle guava variety from Getasblawong Pageruyung Kendal. This variant was chosen. Getas red guava has bright red or bright red flesh, thick, sweet, fragrant, and fresh with an average weight of 400 g / fruit. why not another type of guava because this variety is the most frequent and widely found in the market
5. For testing and training, it has been narrowed down to only this variety of red brittle guava which has been done so that the classification results can be more detailed in one type of red brittle guava variety
6. The conclusion when testing is as follows, from the 50 test data, the accuracy results are 80%. What is obtained from the results of the suitability of the classification with the image is directly divided by 50 test data and then multiplied by 100.The classification level can be precise and appropriate if the results of the image are light levels and the background image is bright so that when cropping is right at the center point of the image and RGB color extraction and conversion HSV can be obtained an appropriate number to be classified by LVQ

suggestions for next project:

1. The process of taking pictures of guava should pay attention to the level of lighting and background of guava fruit and the shooting distance.
2. Guava fruit can be classified based on color and texture using the RGB and HSV color extraction method and the LVQ algorithm
3. The training data can be used as a guide so that the program when testing is able to classify precisely and accurately according to the class where the image is ripe / raw.

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