**CHAPTER 10**

**USER MANUAL**

The user has two options to operate the software that is Non-Real Time and Real Time.

**10.1 Non-Real Time**

The user can access the fruits present in the trained dataset. The images get loaded into the system. The user later can browse the fruit required for recognition by clicking on browse option. The image gets converted to black and white image by clicking on pre-processing button. The obtained image can later be segmented to R, G and B images by clicking on segmentation button. The features of the image can extract by clicking on the feature extraction button.

In the next step, the user has two algorithms to select which can either be SVM or KNN. The algorithm can later compare the trained dataset with that of the test dataset and the name of the fruit image is obtained.

**10.2 Real Time**

The user can access the fruits present in the trained dataset by clicking on realTimeTrain option. The images get loaded into the system. The user later can capture the image of fruit by clicking on Camera On option. The whole process of pre-processing, segmentation and feature extraction takes place by clicking on Capture button. The SVM algorithm later compares the trained dataset with that of the test dataset and the name of the fruit image is obtained.