# CHAPTER IV ANALYSIS AND DESIGN

## 4.1 Analysis

# 4.1.1 Use Case Diagram

According to the Use case diagram, the user can start the application and see the result of the process of this application. After run the application, user should select an image as the file input to be processed by the application. After all process have done, user could see the result.

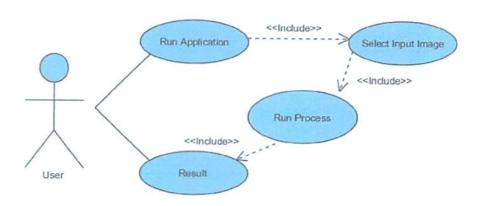


Figure 4.1.1 Use Case Diagram

#### 4.2 Design

### 4.2.1 Class Diagram

First, the tesGUI class, as the main class, will call the main menu and the interface. Here, an user must choose the image file in file menu bar. After user select an image file, there is 2 buttons, Compress and Decompress. If user click the Compress button, the main class call the HuffmanCompress class and the other class that related to HuffmanCompress class. And if user click the Decompress button, the main class will call HuffmanDecompress class and the other class that related to HuffmanDecompress class. After that, the result displayed in the GUI interface.

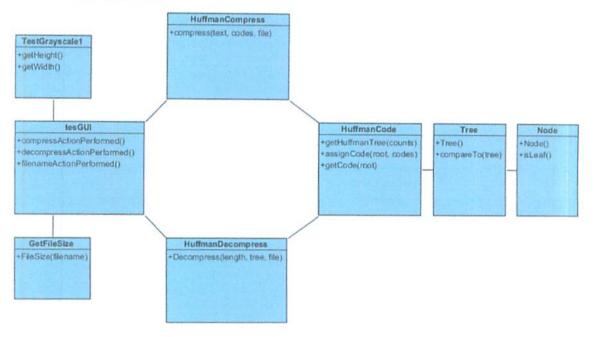


Figure 4.2.1 Class Diagram