

# CHAPTER IV

## Analysis and Design

### 4.1 Analysis

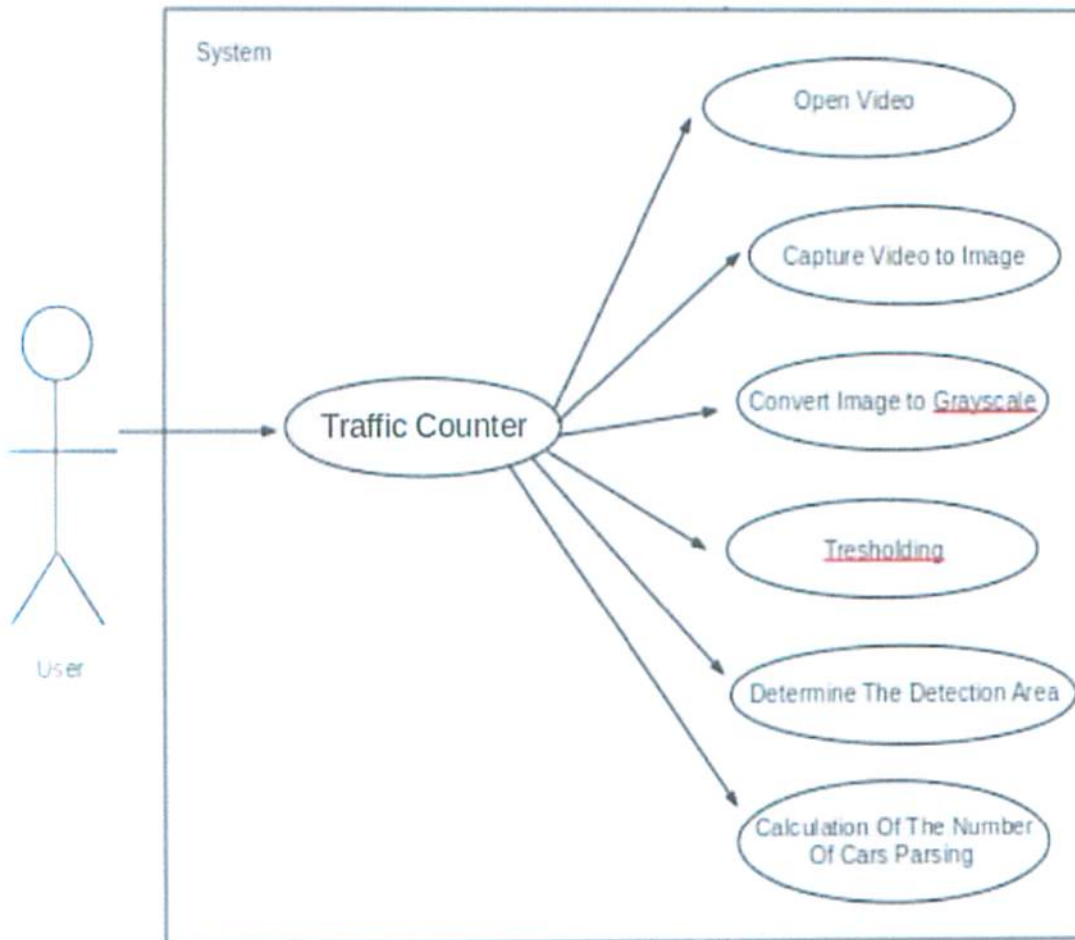


Figure 4.1 Usecase Diagram

## 4.2 Design

Traffic Counter	
<b>second_between_frames</b>	double
<b>mVideoStreamIndex</b>	int
<b>mLastPisWrite</b>	long
<b>Micro_Second_Between_Frames</b>	long
<b>OutputFilePrefix</b>	string
<b>ImageSnapListener( )</b>	

**Figure 4.2 Traffic Counter**

Class Traffic Counter functions for capturing video into images in the allotted time.

GUI Traffic Counter	
<b>jbutton1</b>	<b>JButton</b>
<b>jbutton2</b>	<b>JButton</b>
<b>jbutton3</b>	<b>JButton</b>
<b>jLabel1</b>	<b>JLabel</b>
<b>jLabel2</b>	<b>JLabel</b>
<b>jLabel3</b>	<b>JLabel</b>
<b>jLabel4</b>	<b>JLabel</b>
<b>jLabel5</b>	<b>JLabel</b>
<b>jLabel6</b>	<b>JLabel</b>
<b>jLayeredPane1</b>	<b>JLayeredPane</b>
<b>jLayeredPane2</b>	<b>JLayeredPane</b>
<b>jLayeredPane3</b>	<b>JLayeredPane</b>
<b>jPanel1</b>	<b>JPanel</b>
<b>jTextField1</b>	<b>JTextField</b>
<b>fg</b>	<b>JFileChooser</b>
<b>file</b>	<b>File</b>
<b>InitComponents( )</b>	
<b>jButton1ActionPerformed(ActionEvent evt)</b>	
<b>jButton2ActionPerformed(ActionEvent evt)</b>	
<b>jButton3ActionPerformed(ActionEvent evt)</b>	

**Figure 4.3 GUI Traffic Counter**

Class GUI Traffic Counter function to create the look of a GUI application using java.

<u>Grayscale &amp; Tresholding</u>	
<u>img</u>	<u>BufferedImage</u>
<u>treshold</u>	<u>String</u>
<u>w</u>	<u>int</u>
<u>h</u>	<u>int</u>
<u>gambar</u>	<u>BufferedImage</u>
<u>c</u>	<u>int</u>
<u>r</u>	<u>int</u>
<u>g</u>	<u>int</u>
<u>b</u>	<u>int</u>
<u>gray</u>	<u>double</u>
<u>tres1</u>	<u>int</u>
<u>tres2</u>	<u>int</u>
<u>color</u>	<u>int</u>
<u>pix[ ][ ]</u>	<u>int</u>
<u>jlm</u>	<u>int</u>
<u>mobil</u>	<u>int</u>

**Figure 4.4 Grayscale & Tresholding**

Class Grayscale & Tresholding function to convert RGB image to grayscale and the results of these grayscale given threshold value so that the colored image into black and white.