



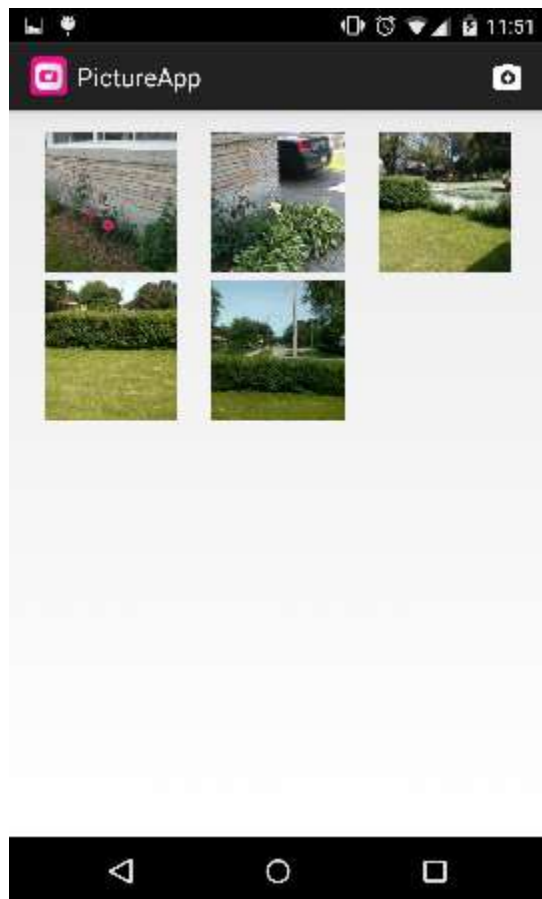
IMAGE PROCESSING – ANDROID APPLICATION REPORT

1. TAKE MULTIPLE PHOTOS WITH A MOBILE DEVICE:

View: activity_main.xml

Activity: MainActivity.java, GridAdater.java

- When user opens the picture app, activity_main.xml view is displayed.
- This view contains the camera icon in the menu bar. On the click event of this icon, the default camera app in the device is launched and the user is able to capture image.
- This image is first stored in the private folder named “PicureApp”, then retrieved and displayed in the gridview.
- The gridview contains the thumbnail of image.
- On the click event of this image thumbnail, a new intent is created to pass this image path to the next activity (DrawingActivity).
- activity (DrawingActivity).



2. SKETCH OVERLAYS ON THE PHOTOS:

View: drawing_view.xml

Activity: DrawingActivity.java

- When user clicks on an image thumbnail on the main activity screen, it opens up into a full screen image in the imageview placed on the drawing_view.xml screen.
- The LoadImage() function:
 - Gets the image path from the received intent
 - Gets the screen size of the parent component of imageview
 - Creates a scaled bitmap of the image located at this path. i.e. loads a full screen image into the imageview.
- The setupCanvas() function:
 - Initializes the paint color and style.
 - Creates a new image bitmap of same height and width as the scaled bitmap.
 - Attach a new canvas to it
 - Draw the selected image bitmap into this canvas with red paint.
 - Set this canvassed bitmap in the imageview.
- The user is then able to draw on this canvas on the onTouch event of this imageview.



3. ADD TEXTUAL COMMENTS TO THE PHOTOS:

View: comment_dialog.xml, drawing_view.xml

Activity: DrawingActivity.java

- When user touches the canvassed image for more than 1.5 seconds (ie 1500ms), ShowDialogBox() function is called which creates a new alert dialog box and sets its view to the comment_dialog.xml view.
- The user then enters the textual comments in the textbox provided and clicks either Ok or Cancel button which dismisses the dialog box.
- If user clicks the Ok button, the drawText() function draws the provided text at the screen location touched by the user.
- The text color is set to blue.

