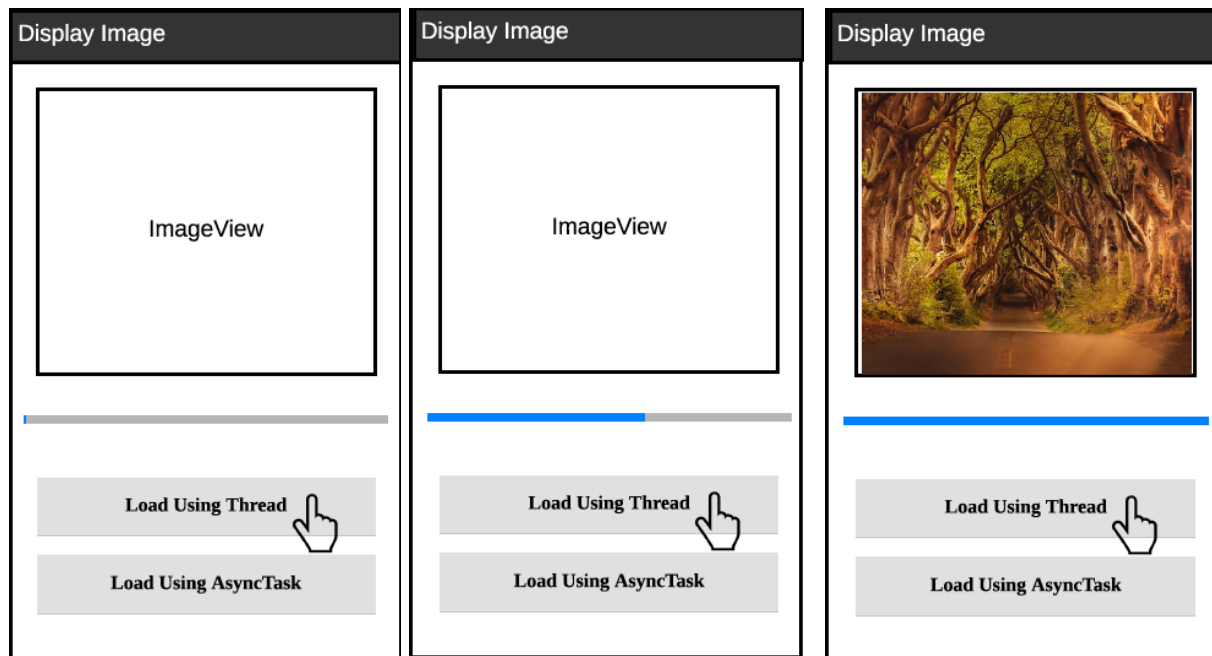


ITIS/ITCS 5180 Mobile Application Development
In Class Assignment 04

Basic Instructions:

1. In every file submitted you **MUST** place the following comments:
 - a. Assignment #.
 - b. File Name.
 - c. Full name
2. Each team is required to submit the assignment on Canvas.
3. Please download the support files provided with this assignment and use them when implementing your project.
4. Submission details:
 - a. Compress the contents of your project folder. The file name is very important and should follow the following format: **800#_InClass04.zip**
 - b. Only one group member is required to submit on behalf of the whole group.
 - c. You should submit the assignment through Canvas: Submit the zip file.
- 5. Failure to follow the above instructions will result in point deductions.**

In this assignment, we will be developing an image display application. We will be learning how we can use Threads and AsyncTasks to download images from URLs and display them using ImageViews.



(a) Main Screen

(b) Loading Image Progress Bar

(c) Image loaded

Figure 1: App Wireframes

This application consists of a single activity. The elements are:

1. An ImageView to display the images.
2. A ProgressBar to display the progress of loading image.
3. Two buttons to select from Thread and AsyncTask to load the images.

Using Threads (50 Points): Please follow the instructions.

1. In the first part we will be using threads to download and display the images.
2. Clicking on “Load Using Thread” button should create a thread to load the Bitmap of image using the URL provided.
3. The URL for the image you will be downloading using Thread is: https://cdn.pixabay.com/photo/2017/12/31/06/16/boats-3051610_960_720.jpg
4. You should display the progress of loading the image using a Horizontal Progress Bar.
5. You should set the progress to ZERO after you successfully load the image into the ImageView.

Using AsyncTasks (50 Points): Please follow the instructions.

1. Next part of the assignment is to load another image using AsyncTask.
2. The URL for the image to be downloaded using AsyncTask is: https://cdn.pixabay.com/photo/2014/12/16/22/25/youth-570881_960_720.jpg

3. Clicking on the “Load Using AsyncTask” button should use an AsyncTask to load the image to the ImageView.
4. The ProgressBar should be implemented as you do in the first part.

Note: The method to load Bitmap from URL is given in the canvas description.