**Android之从网络上获取数据（图片，网页，xml,json等）**

1>从网络上获取数据（图片，网页，xml,json等）  
   
**A.从网络上获取一张图片，然后显示到手机上**这是在java中

public class ImageRequest {

 /\*\*  
  \* @param args  
  \*/  
 public static void main(String[] args) throws Exception {  
  URL url = new URL("<http://i3.itc.cn/20100707/76c_0969b700_d5b4_41cd_8243_9b486be92cc4_0.jpg>");  
  HttpURLConnection conn = (HttpURLConnection)url.openConnection();  
  conn.setRequestMethod("GET");  
  conn.setConnectTimeout(5 \* 1000);  
  InputStream inStream = conn.getInputStream();//通过输入流获取图片数据  
  byte[] data = readInputStream(inStream);//得到图片的二进制数据  
  File imageFile = new File("itcast.jpg");//保存在项目下  
  FileOutputStream outStream = new FileOutputStream(imageFile);  
  outStream.write(data);  
  outStream.close();  
 }

 public static byte[] readInputStream(InputStream inStream) throws Exception{  
  ByteArrayOutputStream outStream = new ByteArrayOutputStream();  
  byte[] buffer = new byte[1024];//定义一个1k的缓冲区  
  int len = 0;  
  while( (len=inStream.read(buffer)) != -1 ){//返回的是实际的字节数  
   outStream.write(buffer, 0, len);//将缓冲区的数据写入到内存中  
  }  
  inStream.close();  
  return outStream.toByteArray();  
 }  
}

在手机上  
 button.setOnClickListener(new View.OnClickListener() {  
   @Override  
   public void onClick(View v) {  
    String path = pathText.getText().toString();  
    try {  
     byte[] data = ImageService.getImage(path);  
     Bitmap bitmap = BitmapFactory.decodeByteArray(data, 0, data.length);//生成位图  
     imageView.setImageBitmap(bitmap);//显示图片       
    } catch (Exception e) {  
     Toast.makeText(ImageShowActivity.this, R.string.error, 1).show();  
     Log.e(TAG, e.toString());  
    }  
   }});  
**<!-- 访问网络的权限 -->**<uses-permission android:name="android.permission.INTERNET"/>

public class StreamTool {

 /\*\*  
  \* 从输入流中获取数据  
  \* @param inStream 输入流  
  \* @return  
  \* @throws Exception  
  \*/  
 public static byte[] readInputStream(InputStream inStream) throws Exception{  
  ByteArrayOutputStream outStream = new ByteArrayOutputStream();  
  byte[] buffer = new byte[1024];  
  int len = 0;  
  while( (len=inStream.read(buffer)) != -1 ){  
   outStream.write(buffer, 0, len);  
  }  
  inStream.close();  
  return outStream.toByteArray();  
 }  
}  
-----------------------------------------------------------------------------------------------------  
public class ImageService {  
   
 public static byte[] getImage(String path) throws Exception {  
  URL url = new URL("<http://i3.itc.cn/20100707/76c_0969b700_d5b4_41cd_8243_9b486be92cc4_0.jpg>");  
  HttpURLConnection conn = (HttpURLConnection)url.openConnection();  
  conn.setRequestMethod("GET");  
  conn.setConnectTimeout(5 \* 1000);  
  InputStream inStream = conn.getInputStream();//通过输入流获取图片数据  
  return StreamTool.readInputStream(inStream);//得到图片的二进制数据  
 }

}  
**B.从网络上获取网页(用的比较少)**byte[] data = readInputStream(inStream);//得到网页的二进制数据  
String html = new String(data,"gb2312");

**C.从网络上获取xml数据，然后显示在手机上** android手机模拟器本身绑定在模拟器上，所以访问web service的时候不能用local host  
 或者用127.0.0.1。而应该使用局域网上的ip地址。  
public class VideoService {  
 /\*\*  
  \* 获取最新的视频资讯  
  \* @return  
  \* @throws Exception  
  \*/  
 public static List<Video> getLastVideos() throws Exception{  
  String path = "<http://192.168.1.100:8080/videoweb/video/list.do>";  
  URL url = new URL(path);  
  HttpURLConnection conn = (HttpURLConnection)url.openConnection();  
  conn.setReadTimeout(5\*1000);  
  conn.setRequestMethod("GET");  
  InputStream inStream = conn.getInputStream();  
  return parseXML(inStream);  
 }  
/\*\*  
  \* 解析服务器返回的协议，得到视频资讯  
  \* @param inStream  
  \* @return  
  \* @throws Exception  
  \*/  
 private static List<Video> parseXML(InputStream inStream) throws Exception{  
  List<Video> videos = null;  
  Video video = null;  
  XmlPullParser parser = Xml.newPullParser();  
  parser.setInput(inStream, "UTF-8");  
  int eventType = parser.getEventType();//产生第一个事件  
  while(eventType!=XmlPullParser.END\_DOCUMENT){//只要不是文档结束事件  
   switch (eventType) {  
   case XmlPullParser.START\_DOCUMENT:  
    videos = new ArrayList<Video>();  
    break;  
   
   case XmlPullParser.START\_TAG:  
    String name = parser.getName();//获取解析器当前指向的元素的名称  
    if("video".equals(name)){  
     video = new Video();  
     video.setId(new Integer(parser.getAttributeValue(0)));  
    }  
    if(video!=null){  
     if("title".equals(name)){  
      video.setTitle(parser.nextText());//获取解析器当前指向元素的下一个文本节点的值  
     }  
     if("timelength".equals(name)){  
      video.setTime(new Integer(parser.nextText()));  
     }  
    }  
    break;  
      
   case XmlPullParser.END\_TAG:  
    if("video".equals(parser.getName())){  
     videos.add(video);  
     video = null;  
    }  
    break;  
   }  
   eventType = parser.next();  
  }  
  return videos;  
 }  
}

**D.从网络上获取json数据，然后显示在手机上**

public class VideoService {  
 /\*\*  
  \* 获取最新的视频资讯  
  \* @return  
  \* @throws Exception  
  \*/  
   
 public static List<Video> getJSONLastVideos() throws Exception{  
  List<Video> videos = new ArrayList<Video>();  
  String path = "<http://192.168.1.100:8080/videoweb/video/list.do?format=json>";  
  URL url = new URL(path);  
  HttpURLConnection conn = (HttpURLConnection)url.openConnection();  
  conn.setReadTimeout(5\*1000);  
  conn.setRequestMethod("GET");  
  InputStream inStream = conn.getInputStream();  
  byte[] data = StreamTool.readInputStream(inStream);  
  String json = new String(data);  
  JSONArray array = new JSONArray(json);  
  for(int i=0 ; i < array.length() ; i++){  
   JSONObject item = array.getJSONObject(i);  
   int id = item.getInt("id");  
   String title = item.getString("title");  
   int timelength = item.getInt("timelength");  
   videos.add(new Video(id, title, timelength));  
  }  
  return videos;  
 }  
   
}