

移动客户端实现文档

# 多媒体播放广告机

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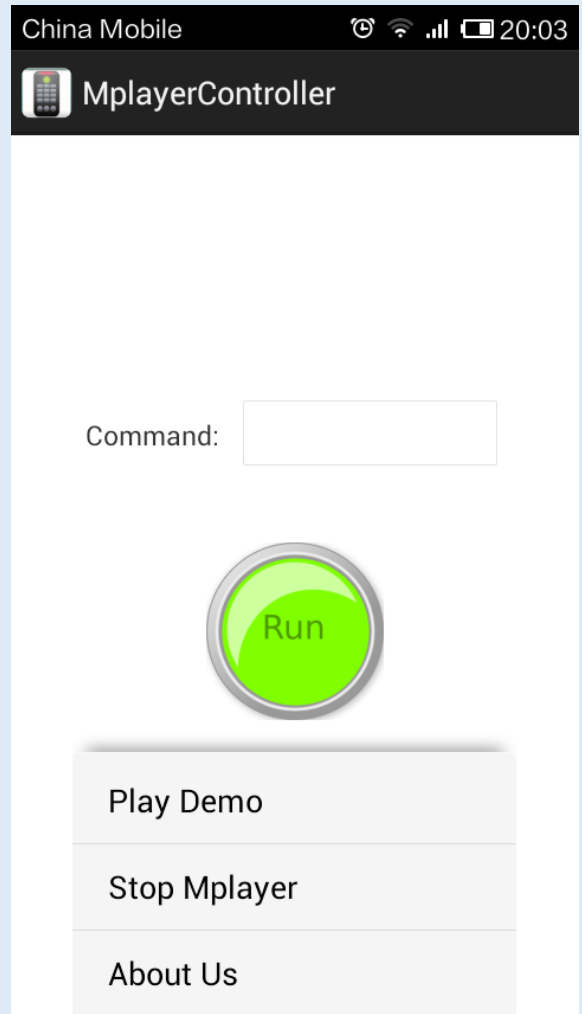
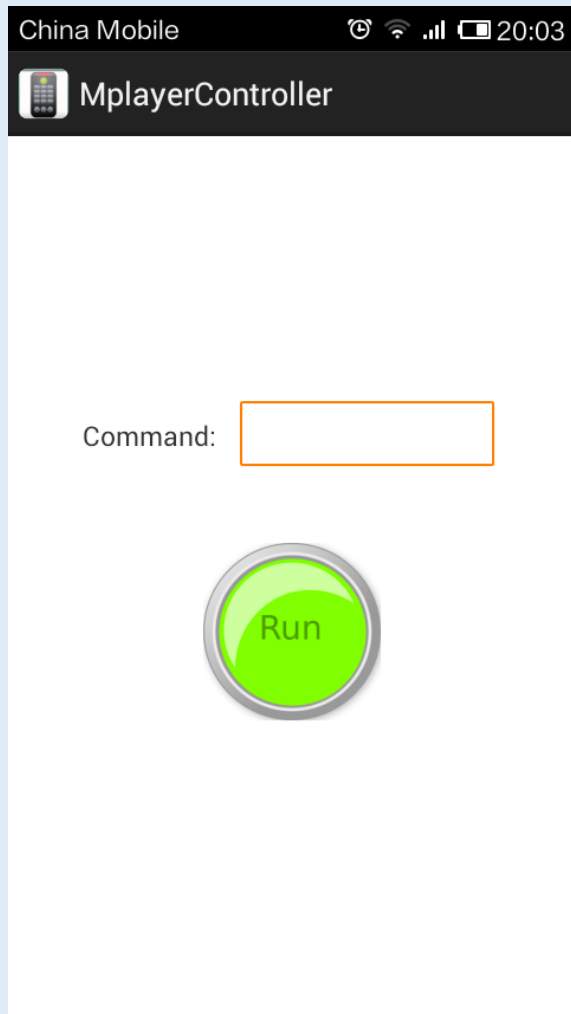
## 一 项目简介

作为一个跨平台的应用，我们不仅开发了功能复杂的 PC 客户端，同时针对火热的移动应用市场开发了 MplayerController，一款在手机上控制视频播放的 Android 应用程序。

MplayerController 界面简洁，通过在 Command 输入框输入相应的指令即可控制嵌入式板上视频的播放与停止，暂时只支持 play 与 stop 简化用户的操控。同时点击菜单按钮可弹出快捷控制指令“Play Demo”和“Stop Mplayer”，这更是省却了用户输入的麻烦，方便演示我们程序的执行效果。

MplayerController 可运行在 Android2.1 及以上版本的智能手机上，使用 Socket 开发技术，运行前请保证嵌入式板的服务器程序已经开启，同时手机必须已经联网。

## 二 程序截图



## 三 实现代码

### 1. MainActivity.java

```
package cn.chendihao.mplayercontroller;

import java.io.BufferedWriter;
import java.io.OutputStreamWriter;
import java.io.PrintWriter;
import java.net.Socket;

import android.os.Bundle;
import android.app.Activity;
import android.app.AlertDialog;
import android.content.DialogInterface;
```

```

import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.view.MenuItem.OnMenuItemClickListener;
import android.view.View.OnClickListener;
import android.widget.EditText;
import android.widget.ImageButton;
import android.widget.Toast;

public class MainActivity extends Activity {

    private final static String SERVER_IP = "192.168.1.64";
    private final static int SERVER_PORT = 4343;

    private Activity activity;
    private EditText commandText;
    private ImageButton runButton;

    private String command;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        activity = this;

        commandText = (EditText) findViewById(R.id.command_text);
        runButton = (ImageButton) findViewById(R.id.run_button);

        runButton.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View arg0) {

                String commandContent = commandText.getText().toString().trim().toLowerCase();

                if (commandContent.startsWith("play") || commandContent.startsWith("stop") ) {
                    command = commandContent;
                    sendCommand(command);
                }else{
                    Toast.makeText(activity, "Invalid Command", Toast.LENGTH_SHORT).show();
                }

            }

        })
    }
}

```

```

    });

}

@Override
public boolean onCreateOptionsMenu(Menu menu) {
    // Inflate the menu; this adds items to the action bar if it is present.
    getMenuInflater().inflate(R.menu.main, menu);

    for (int i = 0; i < menu.size(); i++) {
        menu.getItem(i).setOnMenuItemClickListener(
            new OnMenuItemClickListener() {

                @Override
                public boolean onMenuItemClick(MenuItem item) {
                    switch (item.getItemId()) {

                        case R.id.action_about:

                            Toast.makeText(
                                activity,
                                "Developer:\n\n\t吴健松\n\n\t陈迪豪\n\n\t杨伟宏\n\n\t陈远
龙\n\n\t文力",
                                Toast.LENGTH_LONG).show();

                            break;

                        case R.id.action_play:

                            command = "play ipad2.mp4";
                            sendCommand(command);

                            break;

                        case R.id.action_stop:

                            command = "stop";
                            sendCommand(command);

                            break;

                    }
                    return false;
                }

            }
        );
    }
}

```

```
        return true;
    }
}
```

```
@Override
public void onBackPressed() {
    new AlertDialog.Builder(this)
        .setTitle("Exit Mplayer Controller?")
        .setIcon(R.drawable.ic_launcher)
        .setPositiveButton("Yes",
            new DialogInterface.OnClickListener() {
                @Override
                public void onClick(DialogInterface dialog,
                    int which) {

                    System.exit(0);
                }
            })
        .setNegativeButton("Cancel", null).show();
}
```

```
void sendCommand(String command) {
    try {

        Socket socket = null;

        socket = new Socket(SERVER_IP, SERVER_PORT);

        PrintWriter out = new PrintWriter(new BufferedWriter(
            new OutputStreamWriter(socket.getOutputStream())),
            true);

        out.print(command);

        Toast.makeText(activity, command, Toast.LENGTH_SHORT).show();

        out.close();
        socket.close();

    } catch (Exception e) {
        e.printStackTrace();
        Toast.makeText(activity, "Socket Exception", Toast.LENGTH_SHORT).show();
    }
}
```

```
}
```

## 2. Activity\_main.xml

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".ControllerActivity" >

    <LinearLayout
        android:id="@+id/first_line"
        android:orientation="horizontal"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="130dip">

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Command:"
            android:textSize="15dip"/>

        <EditText
            android:id="@+id/command_text"
            android:layout_marginLeft="10dip"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:minWidth="150dip"/>
    </LinearLayout>

    <ImageButton
        android:id="@+id/run_button"
        android:layout_below="@id/first_line"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="40dip"
        android:layout_centerHorizontal="true"
        android:background="@drawable/run_button"/>

</RelativeLayout>
```