ID TECH
UniMag Android SDK
User Manual

80110504-001-A

12/03/2010

Revision History

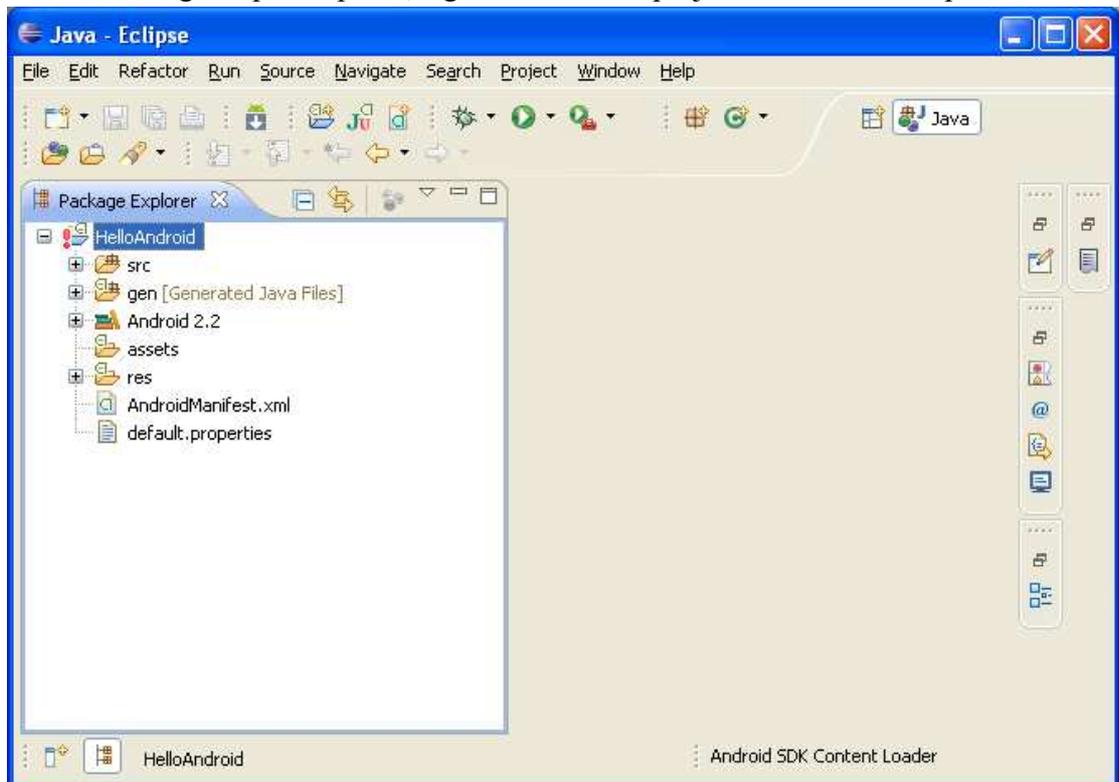| Revision	Description	Date
A	Initial Release	12/03/2010

UniMag Android SDK User Manual

Before using the ID TECH UniMag Android SDK, please have the following programs installed:

1. Android SDK
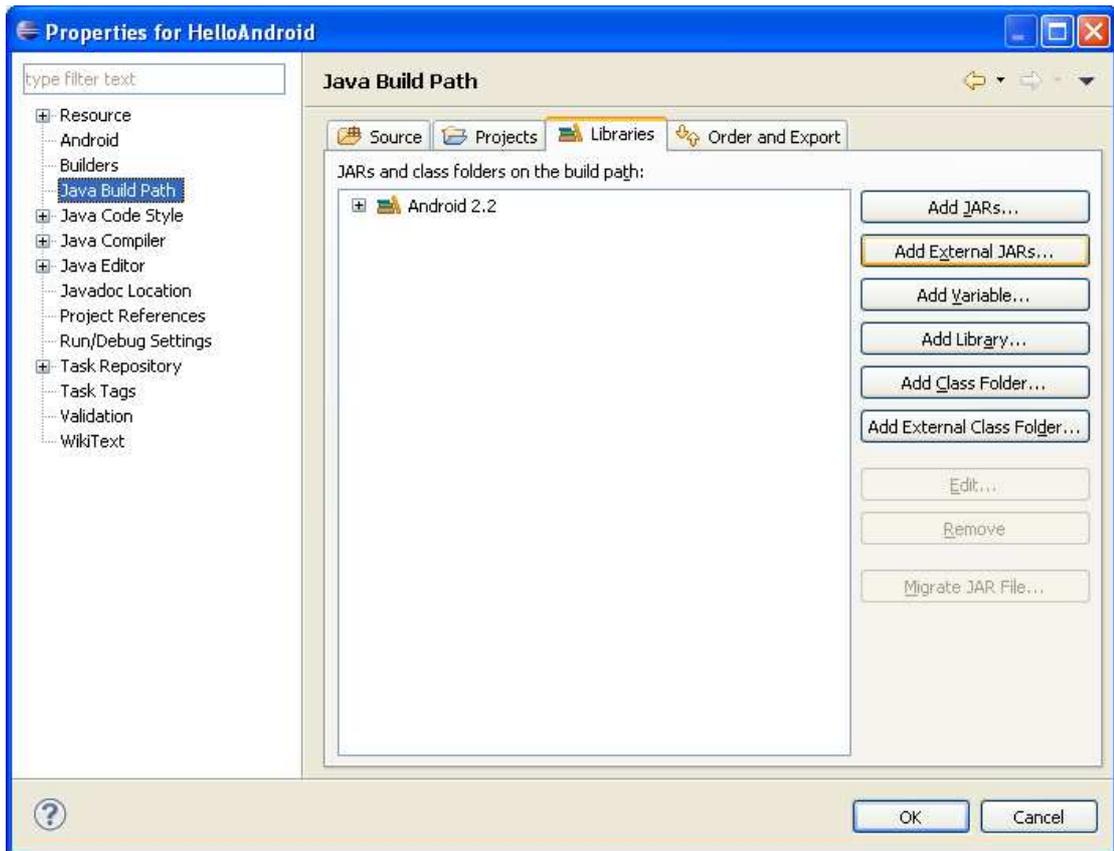2. Eclipse
3. ADT Plugin for Eclipse

Please see http://developer.android.com/sdk/index.html for download links and instructions.

To use the UniMag Android SDK

1. First, create an Android project. Please see http://developer.android.com/resources/tutorials/hello-world.html for sample instructions.
2. Import the UniMag SDK package into the Android project.
   1) On the Package Explorer panel, right-click on the project and select "Properties".

2) From the "Java Build Path" menu, select the "Libraries" tab.

3) Press the 'Add External JARs...' button and browse to the IDTuniMagSDKAndroid.jar file
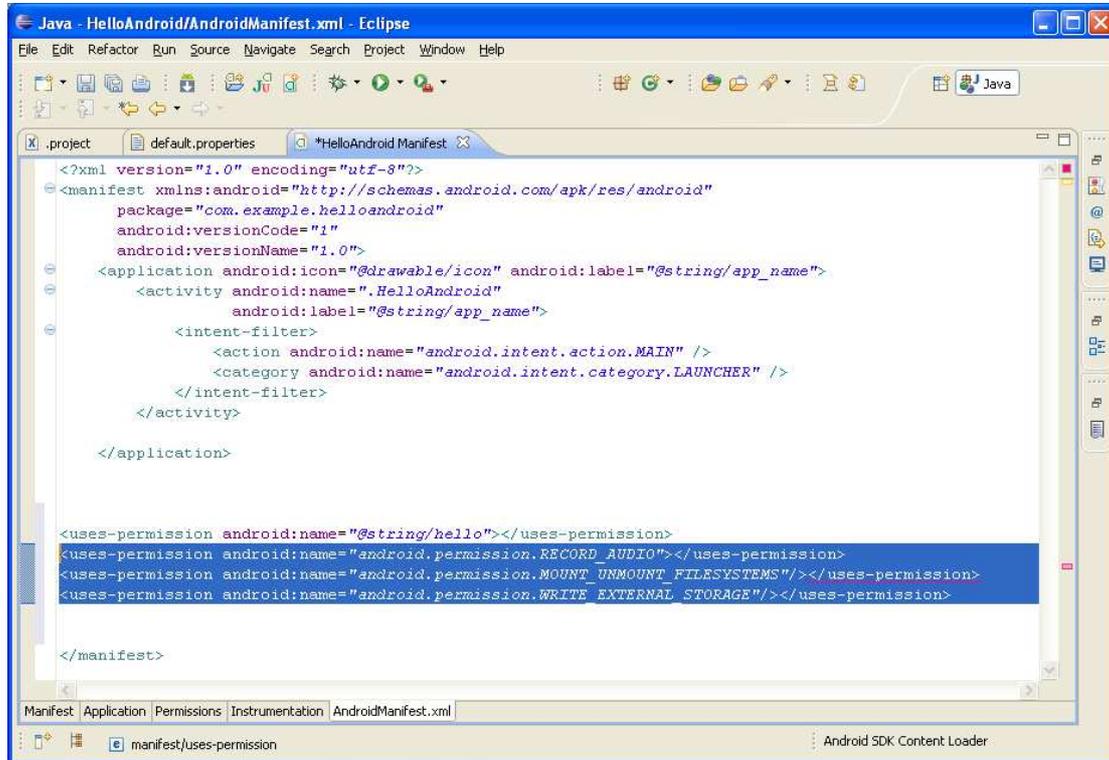
3. On the Package Explorer panel, double click on the AndroidManifest.xml. Add the following permissions

<uses-permission android:name=*"android.permission.RECORD_AUDIO"*/>

<uses-permission android:name=*"android.permission.MOUNT_UNMOUNT_FILESYSTEMS"*/>

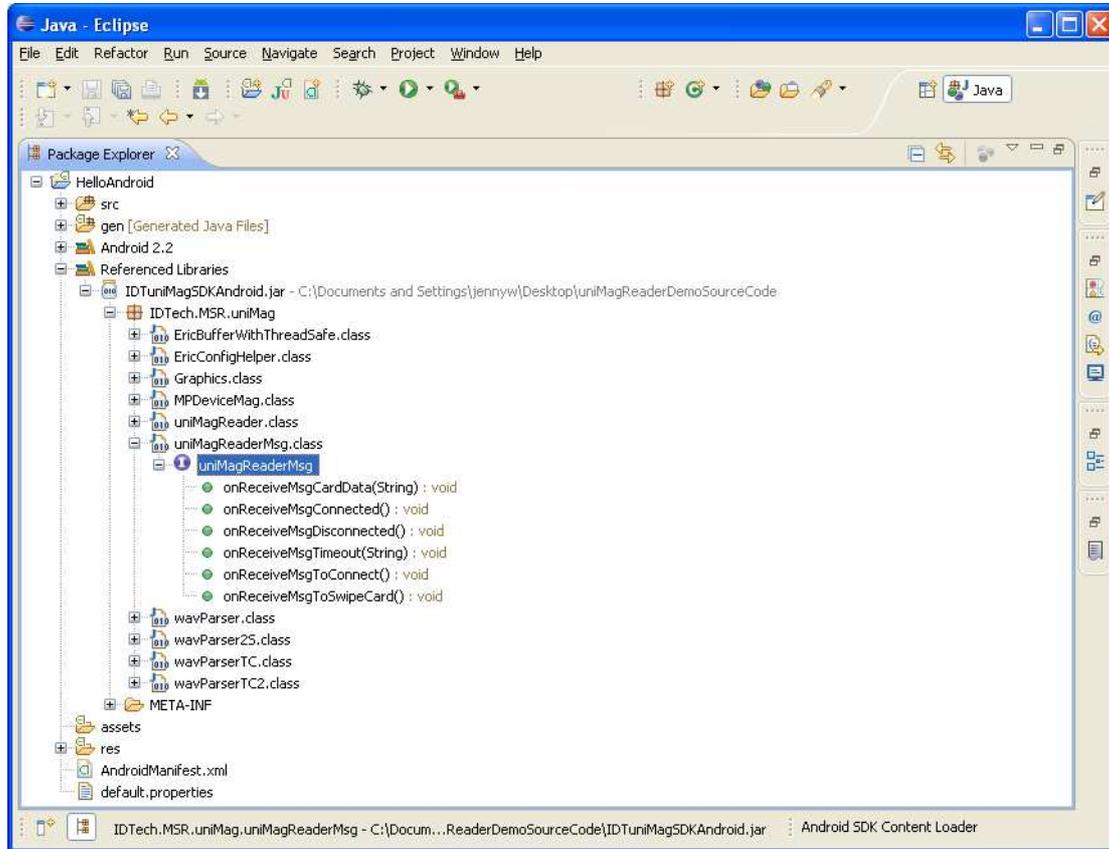<uses-permission android:name=*"android.permission.WRITE_EXTERNAL_STORAGE"*/>

4． Implement the interface uniMagReaderMsg in your Activity extension class.

There are six interface functions to implement, please see the following definition of each interface.

public   interface   uniMagReaderMsg   {

    public void onReceiveMsgToConnect();
    public void onReceiveMsgConnected();
    public void onReceiveMsgDisconnected();
    public void onReceiveMsgTimeout(String strTimeoutMsg);
    public void onReceiveMsgToSwipeCard();
    public void onReceiveMsgCardData(String strMSRData);
}

The following is the description for each interface

Item	Interface	Description
1	onReceiveMsgToConnect	To receive massages when the device is powered up
2	onReceiveMsgConnected	To receive massages when the UniMag device is connected to the phone
3	onReceiveMsgDisconnected	To receive massages when the UniMag device is disconnected to the phone
4	onReceiveMsgTimeout	To receive massages when power up or card swipe mode is timed out
5	onReceiveMsgToSwipeCard	To receive massages when you swipe the card
6	onReceiveMsgCardData	To receive the card data

5．Manage the class uniMagReader to operate the UniMag Reader.
You can manage the class uniMagReader to start or stop swiping a card. First create an instance of uniMagReader and then invoke the function of the class. The class functions are listed below:

```
public class uniMagReader {
    public String getInfoManufacture();
    public String getInfoModule();
    public void setSaveLogEnable(boolean bSaveLog );

    public void startSwipeCard();
    public void registerListen();
    public void stopSwipeCard();
    public void unRegisterListen();

    public boolean isSwipeCardRunning();
}
```

The following is the description for each interface

Item	Function	Description
1	String getInfoManufacture()	To get the phone manufacturer information.
2	String getInfoModule();	To get the module information.
3	void setSaveLogEnable(boolean bSaveLog);	To enable an event log saved in the SD card root directory
4	void startSwipeCard();	To start a card swipe
5	void registerListen();	To register to listen to the headset events. This function should be invoked when the application is launched.
6	void stopSwipeCard();	To stop a card swipe event. This function should be invoked when the application is exited.
7	void unRegisterListen();	To unregister to listen the headset events. This function should be invoked when the application is exited.
8	boolean isSwipeCardRunning();	To check to see if a card is being swiped. If true, to set log enable is forbidden. If false, the event logs can be enabled.

For more information on how to use the above functions, please refer to the UniMag Android SDK demo source code.

Note:
1．Please do not connect the mobile phone to PC as the USB Mass Storage device when you swipe a card.
2．When the "to power up" dialog shows up on the screen for more than 30 seconds with no timeout error, please verify that the headphone Media Volume is set to maximum and re-plug the UniMag device.