

Slamware

Autonomous Robot Localization and Navigation Solution

Connect SDK

android_1.0_beta

2017-05-19 rev.1.8

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SlamwareConnectSDK(Android) has a libSlamwareConnectSDK.jar file.
With this SDK, we can develop the following features in Slamware:

- Discover device via WIFI automatically
- Configure device via Bluetooth

To start application development based on SlamwareConnectSDK, the development environment should meet the following requirements:

- The computer needs the Android Studio 1.5 or higher version installed. This document is based on Android Studio 1.5.

a. Open the Android SDK in Android Studio 1.5.

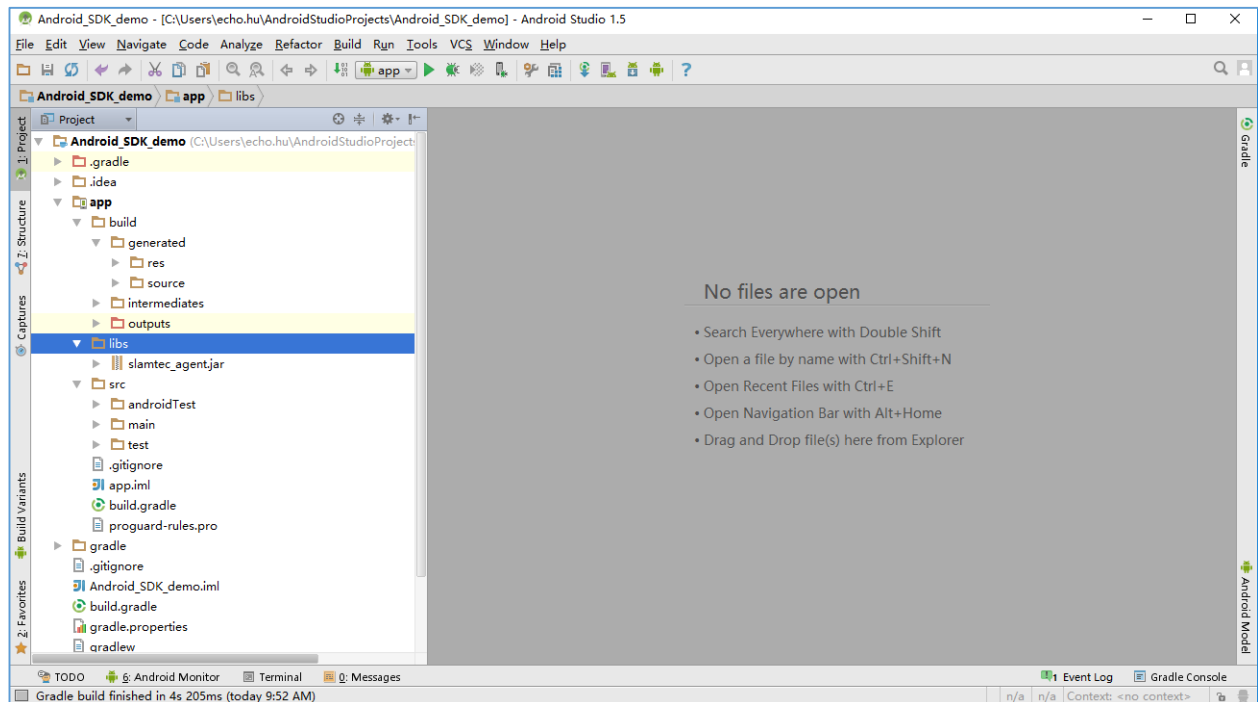


Figure1 Create project step a

b. Copy the file libSlamwareConnectSDK.jar and paste it in the libs folder in step a.



Figure 2 Create project step b

- c. After pasting, the file will show in the libs folder. Please go to Tools>Android and click **Sync Project with Gradle Files**. Then we can start development.

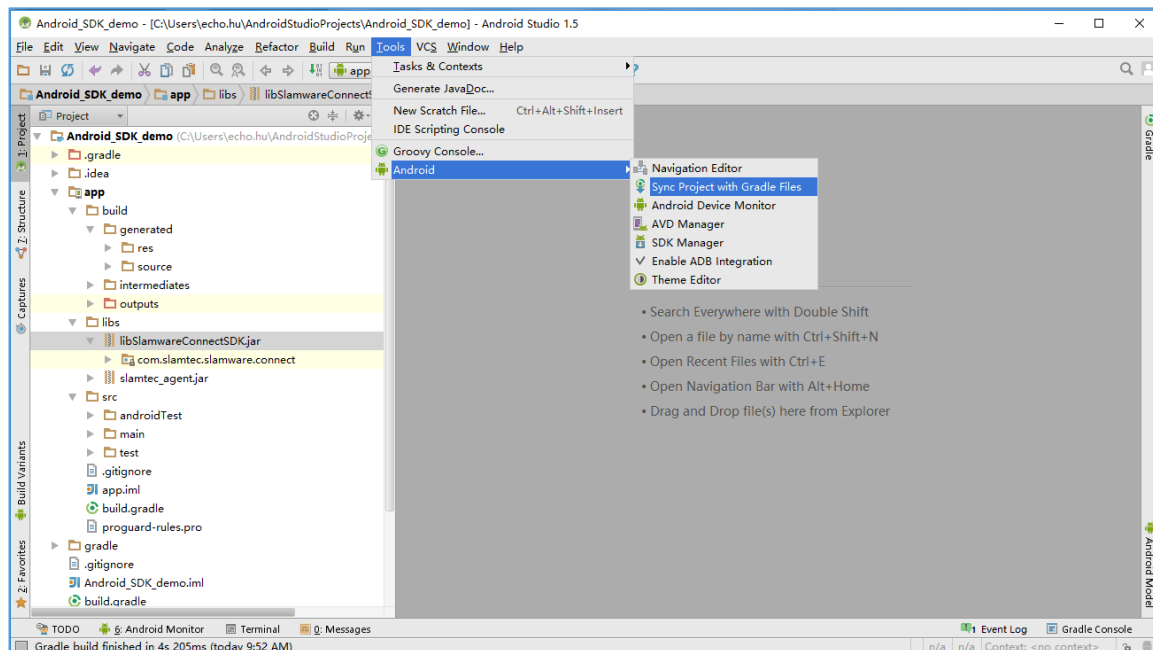


Figure 3 Create project step c

Overview

Item	Description
AutoDiscovery class	Automatically discover device via WIFI.
AutoDiscoveryDevice class	Device class via automatically discovery.
BaseDeviceModel class	Device base class.
IAutoDiscoveryCallBack interface	AutoDiscoveryCallBack interface definition
ISmartConfigCallBack interface	ISmartConfigCallBack 接口定义。
SmartConfig class	Configure the device via Bluetooth.

AutoDiscovery Class

Overview

Automatically discover device via WIFI.

Constants

```
public static final int STATE_START = 0
public static final int STATE_STOP = 1
public static final int STATE_ERROR_START_FAIL = 10
public static final int STATE_ERROR_STOP_FAIL = 11
public static final int STATE_ERROR_RESOLVE_FAIL = 12
```

Constructor

```
public AutoDiscovery(Context var1, IAutoDiscoveryCallback var2)
```

Method

```
public boolean startDiscovery()
public void stopDiscovery()
public static final int STATE_START = 0
```

Start.

```
public static final int STATE_STOP = 1
```

Stop.

```
public static final int STATE_ERROR_START_FAIL = 10
```

Start fail.

```
public static final int STATE_ERROR_STOP_FAIL = 11
```

End error.

```
public static final int STATE_ERROR_RESOLVE_FAIL = 12
```

Resolve error.

```
public AutoDiscovery(Context var1, IAutoDiscoveryCallback var2)
```

Automatically discover device via WIFI.

```
public boolean startDiscovery()
```

Start to discover device.

```
public void stopDiscovery()
```

Stop to discover device.

AutoDiscoveryDevice Class

Overview

Device class discovered by AutoDiscovery.

Super Class

Inherited from BaseDeviceModel.

Constructor

```
public AutoDiscoveryDevice(String var1, String var2, String  
var3, int var4)
```

Method

```
public String getIpAddress()
```

```
public int getPort()
```

```
public AutoDiscoveryDevice(String var1, String var2, String var3, int  
var4)
```

Discover device automatically.

```
public String getIpAddress()
```

Get IP address.

```
public int getPort()
```

Get port.

BaseDeviceModel Class

Overview

Device base class.

Constants

```
public static final int SOURCE SMART CONFIG = 1
```

```
public static final int SOURCE AUTO DISCOVERY = 2
```


Constructor

```
public BaseDeviceModel(String var1, String var2, int var3)
```

Method

```
public String getSdpName()
```

```
public String getModel()
```

```
public int getSource()
```

```
public static final int SOURCE_SMART_CONFIG = 1;
```

It indicates that the device is discovered by SamrtConfig.

```
public static final int SOURCE_AUTO_DISCOVERY = 2;
```

It indicates that the device is discovered by AutoDiscovery.

```
public BaseDeviceModel(String var1, String var2, int var3)
```

Get base device model name.

```
public String getSdpName()
```

Get SDP name.

```
public String getModel()
```

Get model information.

```
public int getSource()
```

Get resources.

IAutoDiscoveryCallBack Interface

Overview

Interface.

Method

```
void onAutoDiscoveryStateChanged(int var1)
```

```
void onAutoDiscoveryFound(AutoDiscoveryDevice var1)
```

```
void onAutoDiscoveryLost(AutoDiscoveryDevice var1)
```

`void onAutoDiscoveryStateChanged(int var1)`

AutoDiscovery status change.

`void onAutoDiscoveryFound(AutoDiscoveryDevice var1)`

AutoDiscovery diacover.

`void onAutoDiscoveryLost(AutoDiscoveryDevice var1)`

AutoDiscovery lost.

ISmartConfigCallback Interface

Overview

Interface.

Method

`void onSmartConfigFound(BaseDeviceModel var1)`

`void onSmartConfigStateChanged(int var1)`

`void onSmartConfigFound(BaseDeviceModel var1)`

SmartConfig discovery.

`void onSmartConfigStateChanged(int var1)`

SmartConfi status change.

SmartConfig Class

Overview

Configure the device via Bluetooth.

Constants

`public static final int SC FAILED = 0`

`public static final int SC SUCCESS = 1`

`public static final int SC CONFIGING = 2`

`public static final int SC WRONG SSID PASSWORD = 3`

Constructor

`public SmartConfig(Context var1, ISmartConfigCallback var2)`

Method

`public void setWifiInfo(String var1, String var2)`

`public boolean isBluetoothEnabled()`

`public boolean startScan()`

`public void stopScan()`

`public void startConfig(BaseDeviceModel var1)`

`public boolean supportSmartConfig()`

`public static final int SC_FAILED = 0;`

SmartConfig failed.

`public static final int SC_SUCCESS = 1;`

SmartConfig success.

`public static final int SC_CONFIGING = 2;`

SmartConfig is configuring.

`public static final int SC_WRONG_SSID_PASSWORD = 3;`

The SSID or password is incorrect when configuring SmartConfig.

`public SmartConfig(Context var1, ISmartConfigCallback var2)`

Configure the device via Bluetooth.

`public void setWifiInfo(String var1, String var2)`

Set WIFI information. Var is ssid, var2 is password.

`public boolean isBluetoothEnabled()`

Whether the Bluetooth is turned on.

`public boolean startScan()`

Start scan.

`public void stopScan()`

Stop scan.

`public void startConfig(BaseDeviceModel var1)`

Start configuration.

```
public boolean supportSmartConfig()
```

Smart configuration supported.

Note : Invoke setWifiInfo function before invoking SmartConfig function.

Date	Version	Description
2016-03-11	0.1	Initial version

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