



Tizen 可穿戴设备开发 最佳实践

Adam Panasiuk



演示内容

- 简介
- **Tizen** 可穿戴设备
- 开发与技巧
- 测试和认证
- 总结
- 问答

简介



可穿戴设备





Tizen 可穿戴设备

Tizen 可穿戴设备: Gear 2



Tizen 可穿戴设备: Gear S



Tizen 可穿戴设备：入门



Tizen 可穿戴设备：入门

How Can I Develop a Gear Application?



SDK Download

Tizen SDK for Wearable Samsung Accessory SDK

>> [Download Links](#)



Gear App Development

Getting Started with samples & Documents!

>> [Technical Resource](#)



Getting the Gear Certificate

Be secure your app to upload to Samsung Gear Apps

>> [Certification Guide](#)



Testing

If you have no Gear device, Use Gear Emulator & RTL

>> [Get Gear Emulator](#)

>> [RTL Service](#)



Registration through Samsung GALAXY Apps

>> [Gear App Distribution Guide](#)

>> [Samsung GALAXY Apps Seller Office](#)

开发与技巧



Tizen 可穿戴设备：入门

<http://developer.samsung.com/samsung-gear>

SAMSUNG DEVELOPERS | DEVELOPERS FOR RISKY SERVICES | FORUM | BLOG | SIGN IN | SIGN UP | ENGLISH

Device

- Samsung Gear
- Samsung Mobile
- HomeSync
- S Console

Services

- Samsung Account API
- Samsung AdHub SDK
- Samsung ChatON SDK
- Samsung Group Play SDK
- Samsung IAP SDK
- Samsung Smart Home SDK
- Samsung Wallet API
- S Health Service SDK
- Smart Connectivity SDK

Convergence

- Samsung Web API

Partner Tools

Android

Others

Development Overview

Samsung Gear

Overview | FAQ



Tizen SDK for Wearable 1.0.0
Oct 6, 2014

Download

Samsung Accessory SDK 2.1.11
Oct 6, 2014

Download

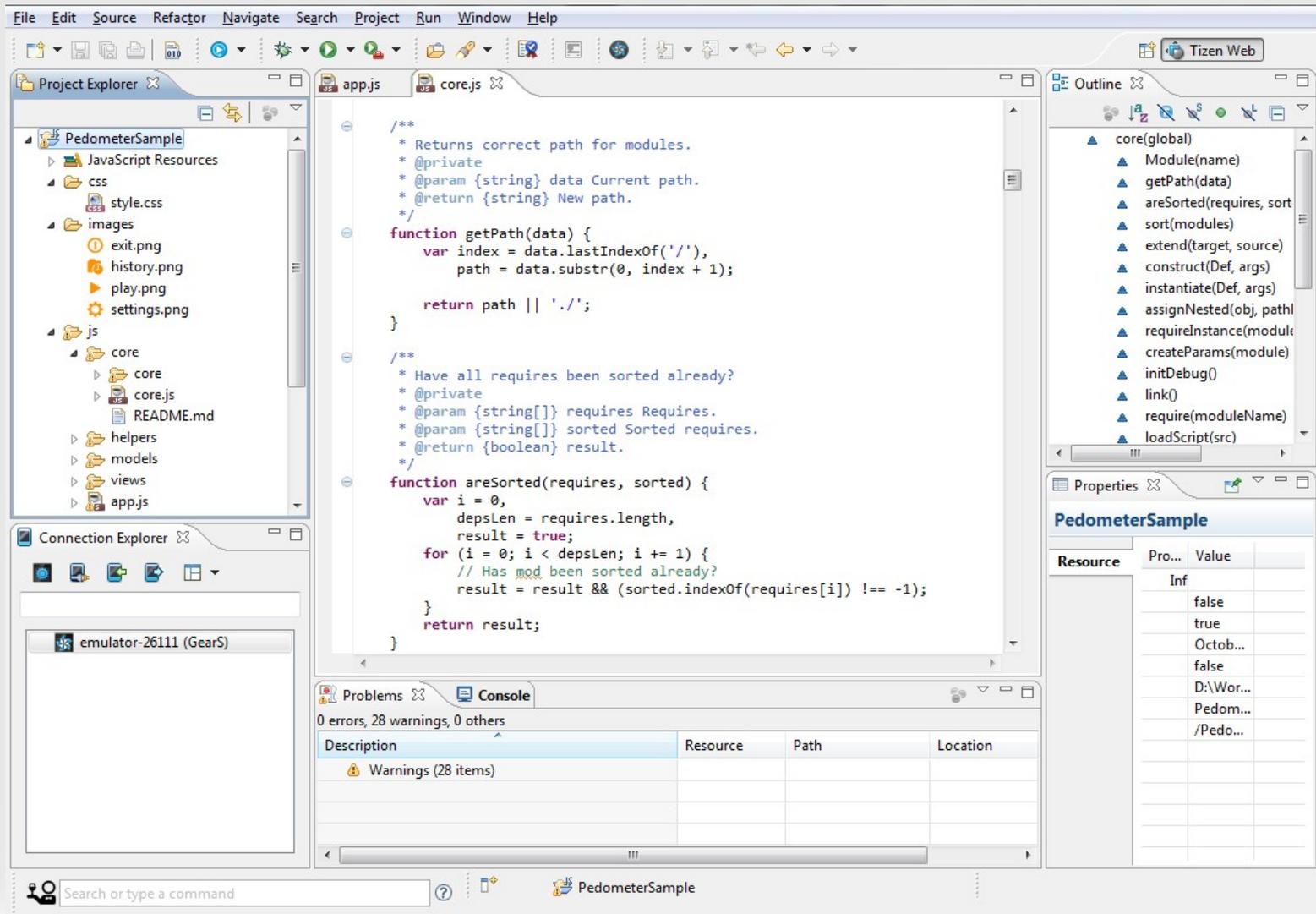
NOTE For developing Samsung Gear Application, you need both of the **Tizen SDK for Wearable** and **Samsung Accessory SDK**. You can find more details on how to develop Gear Application in the 'Hello Accessory Developer's Guide' document below.

Samsung Gear Application consists of the Host-side Application which runs on **Android-based Samsung mobile devices**, and the Wearable-side Widget which runs on **Tizen-based Samsung Gear devices**.

The Host-side Application can be developed in **the common Android development environment**, whereas, the Wearable-side Widget can be developed with **Tizen SDK for Wearable**.

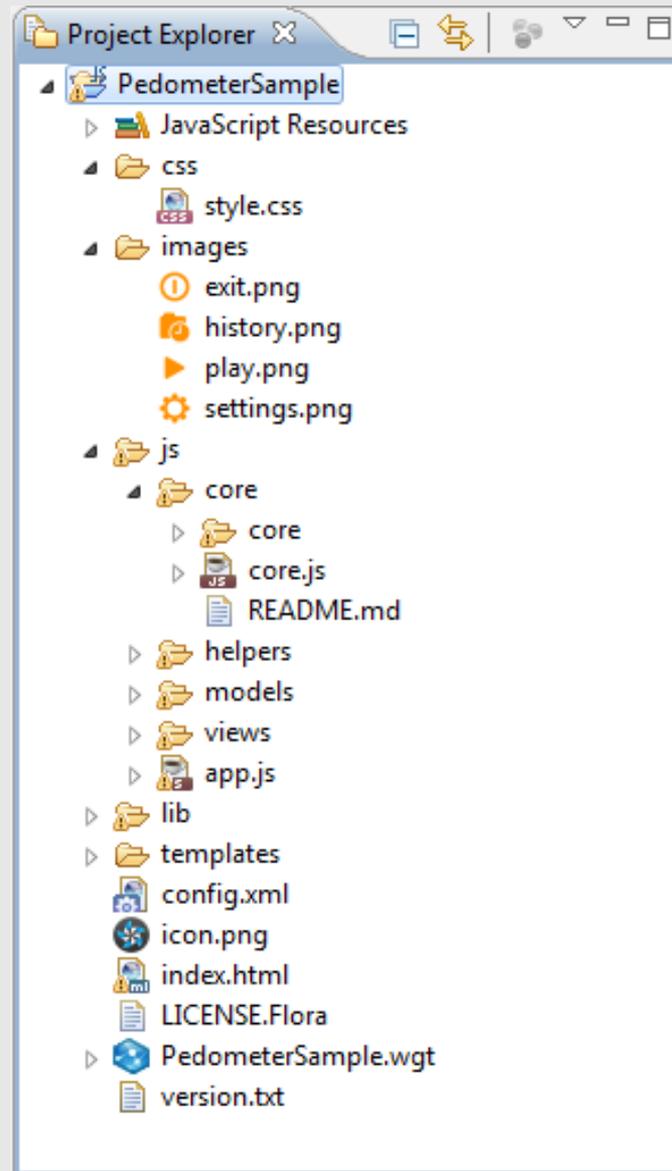
In addition, **Samsung Accessory SDK**, is the necessary component for communicating between the Host-side Application and Wearable-side Widget. You can find more details below.

Tizen 可穿戴设备 IDE



Tizen 可穿戴设备 IDE

项目组件:

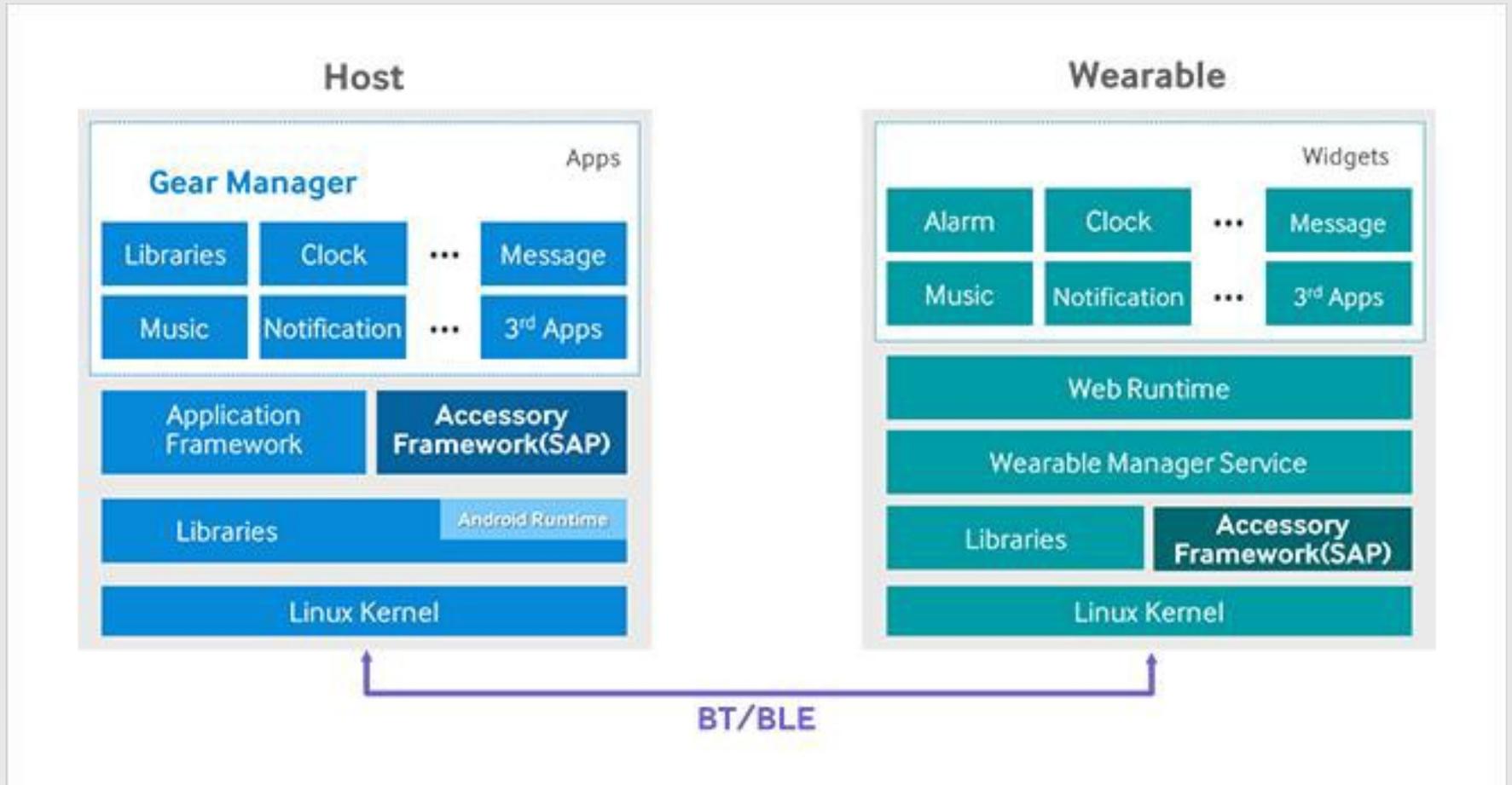


Tizen 可穿戴设备

Gear Manager, Wearable Manager Service, Samsung Accessory Protocol

The screenshot displays the Samsung Gear Manager application interface. On the left, a panel shows a smartphone and a smartwatch with the text "Connecting to Gear..." and a "Cancel" button. The main area is divided into two sections: "EDIT HOME SCREEN" and "APPS AND SETTINGS". The "EDIT HOME SCREEN" section includes "Home screen styler". The "APPS AND SETTINGS" section lists various applications, including "S Health", "Notifications", "My apps", and "Samsung Gear Apps". On the right, a "My apps" list shows installed applications such as Camera, Contacts, Controls, Dialler, Email, Exercise, Find My Device, Gallery, Heart Rate, and Logs, each with a settings gear icon.

Tizen 可穿戴设备



开发技巧

使用专用的 **Tizen API**，而非通用的 **JavaScript**。

示例：

不要使用：

```
var date = new Date();
```

而要使用：

```
var date = tizen.time.getCurrentDateTime();
```

专用的 **Tizen** 可穿戴设备 **API**与连接的手机保持同步，可防止与手动更改时间和切换时区相关的问题。

更多信息：<https://developer.tizen.org/dev-guide/2.2.1/org.tizen.web.device.apireference/tizen/time.html>

开发技巧

在需要时使用 CPU 和 唤醒锁。

闲置特定时间后，设备将关闭其屏幕。为了防止这种操作，请实施唤醒和 CPU 锁。

```
tizen.power.request("SCREEN", "SCREEN_NORMAL"); tizen.power.request('CPU', 'CPU_AWAKE');
```

不再需要时，请释放锁。

```
tizen.power.release("SCREEN"); tizen.power.release('CPU');
```

若要使用这一功能，则必须在 config.xml 文件声明权限

```
<tizen:privilege name="http://tizen.org/privilege/power"/>
```

更多信息：<https://developer.tizen.org/dev-guide/2.2.1/org.tizen.web.device.apireference/tizen/power.html>

开发技巧

<div> 元素以橙色突出显示。

在设备上触摸可点击的 **<div>** 元素后，该元素将在短时间内以橙色突出显示。若要禁用此功能，请在您的 **CSS** 中插入以下内容：

```
{  
-webkit-tap-highlight-color: rgba(0, 0, 0, 0);  
-webkit-tap-highlight-color: transparent;  
}
```

更多信息：

<https://developer.tizen.org/forums/web-application-development/gear-tags-onclick-are-highlighted-orange>

开发技巧

如果您的应用为不同分辨率的多种设备而设计，请使用
CSS Media Queries。

示例：

```
// CSS for screens with max resolution == 320px - Gear, Gear 2, Gear 2 Neo
@media screen and (max-width:320px) { div#main {
width:320px; height:320px;
}
}
// CSS for screens with max resolution == 360px - Gear S
@media screen and (max-width:360px) { div#main {
width:360px; height:480px;
}
}
// Other styles, that are the same for both resolutions div#container {
background-color:#000000;
}
```

记得将相应的行添加到您的 config.xml 文件中

```
<feature name="http://tizen.org/feature/screen.size.all"/>
```

更多信息：

https://developer.mozilla.org/en-US/docs/Web/Guide/CSS/Media_queries

开发技巧

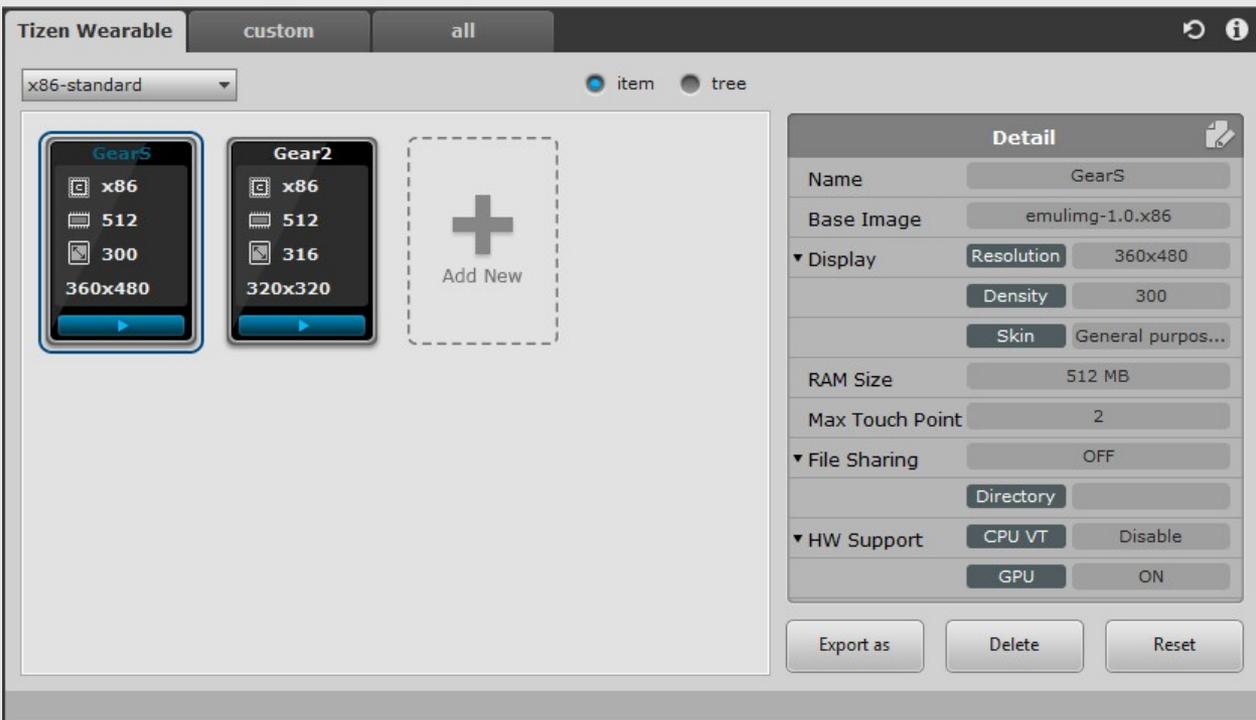
您也可以根据分辨率上传不同的二进制文件
(推荐在设备间的功能不同时使用)

请记住，不是所有设备都具有相同的功能。例如，**Gear 2 Neo** 没有摄像头。在这种情况下，您可以在相同的应用名称下上传不同的二进制文件。



测试和认证

模拟器



- RTL(Remote Test Lab) requires a Modern browser with JavaScript and a Java runtime environment (JRE v1.7 +).
- Configuration requirements:

Configuration check result : **Pass**

Show Details ▼

✔ Once your configuration is OK, Continue to select a device.

RTL(Remote Test Lab) allows users to install and test applications over the web.

Hot

Android

Tizen

Wearable

MY RESERVATIONS

Gear S

Gear S



-- OS Version -- ▼

-- Device List -- ▼

Reserve for 30 minutes ▼

Start

Gear 2

Gear 2



-- OS Version -- ▼

-- Device List -- ▼

Reserve for 30 minutes ▼

Start

Gear 2 Neo



-- OS Version -- ▼

-- Device List -- ▼

Reserve for 30 minutes ▼

Start

认证

Samsung GALAXY Apps Samsung Apps TV Seller Office • ENGLISH • 中國語 • 한국어(한국) Log in | Join Now



Samsung SMART TV

Samsung smart TV leads global market

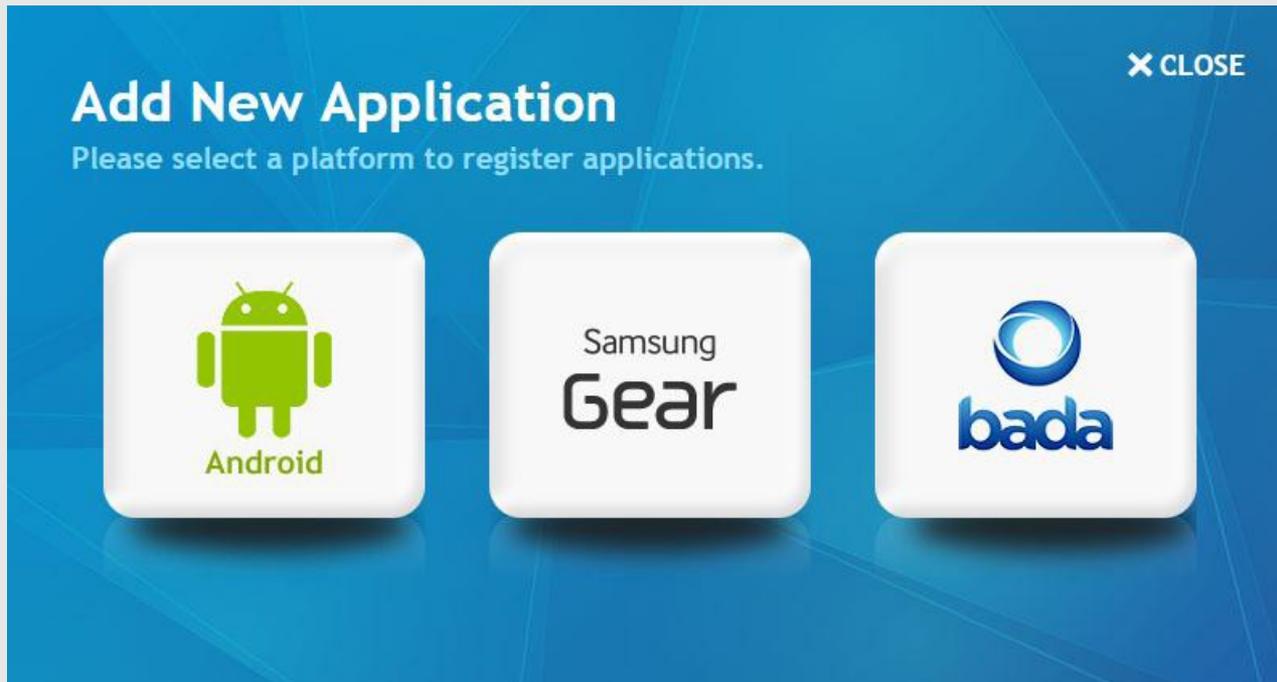
Smart interaction communicates with you
Smart evolution is up-to-date every year

* UI can vary by service countries.

SAMSUNG Terms and Conditions | Privacy Policy
Copyright © Samsung Electronics Co.,Ltd. All rights reserved.

<http://seller.samsungapps.com/>

认证



<http://seller.samsungapps.com/>

总结





问答

感谢您的关注。



TIZEN™
DEVELOPER
SUMMIT
2014



SHANGHAI
TIZEN开发者峰会 (上海)