

未來的浪潮

Java、嵌入式、物聯網和雲端

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精誠資訊 恆逸教育訓練中心 講師

OCEWCD、OCPJP7、SCJP 6+、SCJA、SCBCD、SCWCD、SCJP

Android APP 程式開發剖析 第二版

Raspberry Pi 嵌入式應用程式開發：使用 Java

Java 與 Android 技術整合應用 - 手機 / 平板 / 電腦 無線點餐系統實作

MySQL 新手入門超級手冊(適用 MariaDB)

Android APP 程式開發剖析

恆逸教育訓練中心簡介

- ◆ 恆逸教育訓練中心長期深耕IT與多媒體教育訓練領域，服務據點遍佈台北、新竹、台中、高雄四地
- ◆ 目前擁有國際各大原廠授權，為泛亞洲及台灣地區最多國際原廠授權的技術教育訓練中心



恆逸教育訓練中心簡介

- ◆恆逸是企業最信任的IT專業教育訓練中心，一次可滿足資訊、管理、設計各方面教育訓練需求

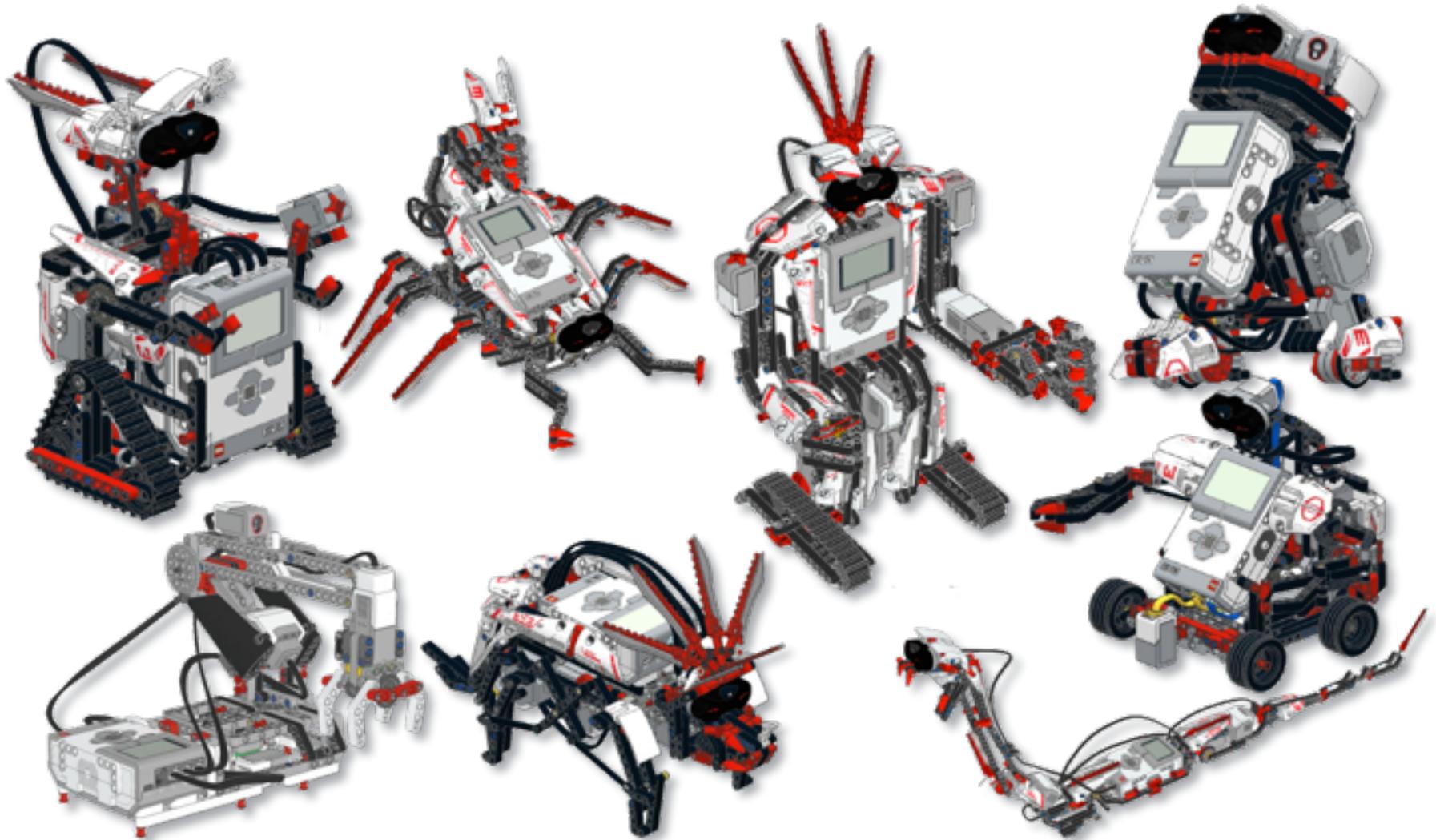


樂高積木





Lego Mindstorms EV3



Java for LEGO Mindstorms EV3

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New to Java

Community

Java Magazine

Java for LEGO® Mindstorms® EV3



LEGO® Mindstorms® EV3 can run the ARMv5 port of Java SE Embedded with just a few simple steps. This page will help point you to all the resources you need to get started!

[See a video of Java SE Embedded on LEGO® Mindstorms® EV3.](#)

[Guide on how to run Java on Lego EV3](#) via leJOS wiki (not affiliated with LEGO® or Oracle).

More information about Java on LEGO® Mindstorms® can be found at the [leJOS community site](#) (not affiliated with LEGO® or Oracle).

The [leJOS community](#) is working on enabling LeJOS on MINDSTORMS EV3. Oracle is making our Java implementation available here to support their efforts. For now, please consult the [leJOS forums](#) for status and updates.

If you're feeling adventurous after reading up some of the above links, Download either the Java SE Embedded 8 ARMv5 port or Java SE Embedded 7 Update 51 ARMv5 port (see below).

[Java SE Embedded 8](#) enables developers to create customized JREs using the [JRECreate](#) tool. Starting with Java SE Embedded 8, individual JRE downloads for embedded platforms are no longer provided. To get started, download the bundle below and follow [instructions](#) to create a JRE that suits your application's needs.

Java for LEGO® Mindstorms® EV3



MINDSTORMS

LEGO® Mindstorms® EV3 can run the ARMv5 port of Java SE Embedded with just a few lines of code. This page will help point you to all the resources you need to get started!

[See a video of Java SE Embedded on LEGO® Mindstorms® EV3.](#)

[Guide on how to run Java on Lego EV3](#) via leJOS wiki (not affiliated with LEGO® or Oracle). More information about Java on LEGO® Mindstorms® can be found at the [leJOS community](#) (not affiliated with LEGO® or Oracle).

The [leJOS community](#) is working on enabling LeJOS on MINDSTORMS EV3. Oracle has a Java SE Embedded implementation available here to support their efforts. For now, please consult the [leJOS community](#) for updates.

LEJOS

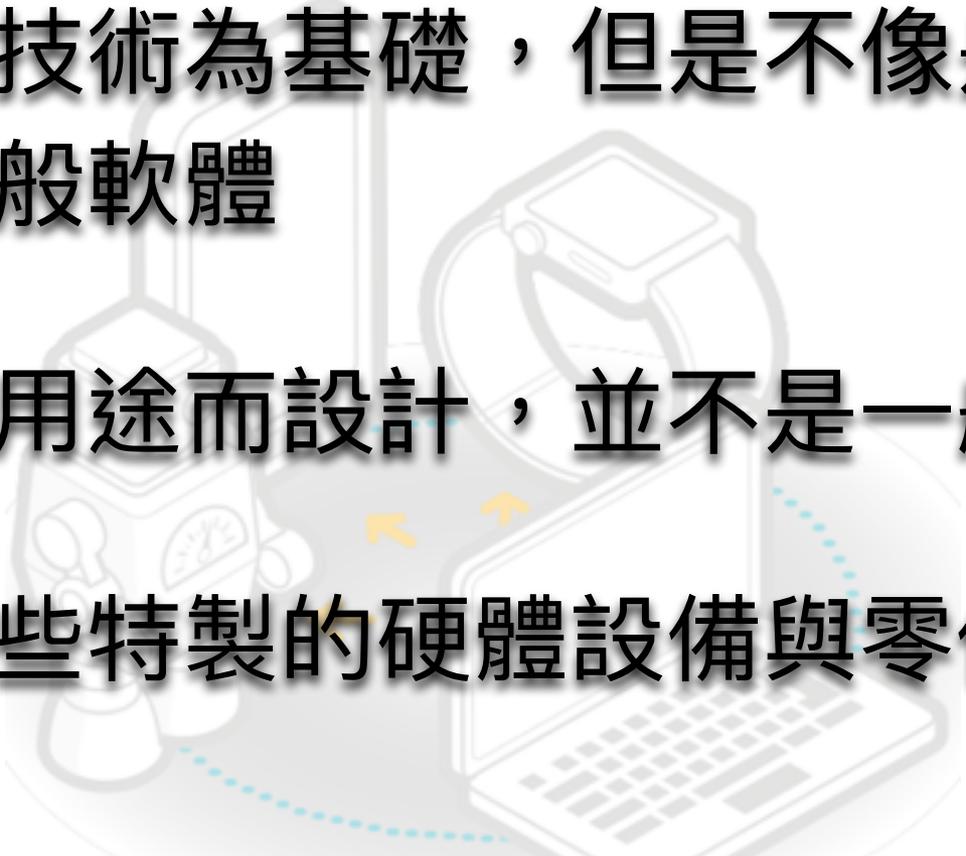
- 讓LEGO Mindstorms有Java的腦袋
- 非常小的Java虛擬機器
- 以Java SE Embedded 7為基礎
- 提供LEJOS EV3 API

BOBB3E示範

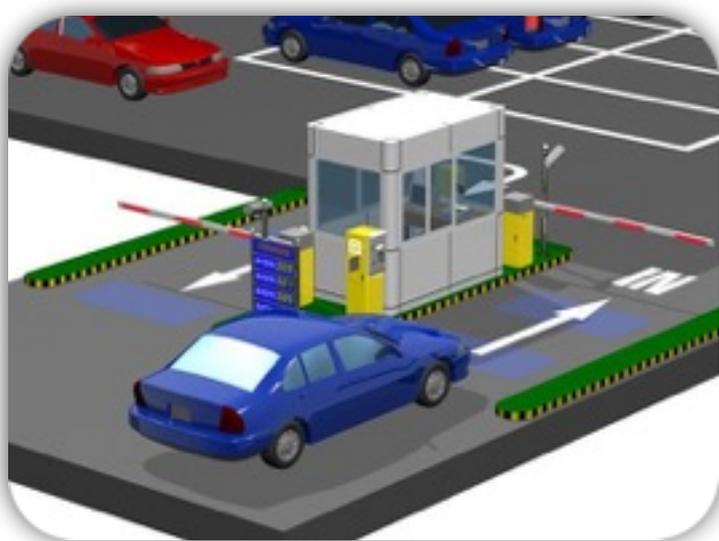
LEGO **MINDSTORMS**
EV3



嵌入式系統

- 以電腦技術為基礎，但是不像是個人電腦與一般軟體
 - 為特定用途而設計，並不是一般用途
 - 包含一些特製的硬體設備與零件
- 

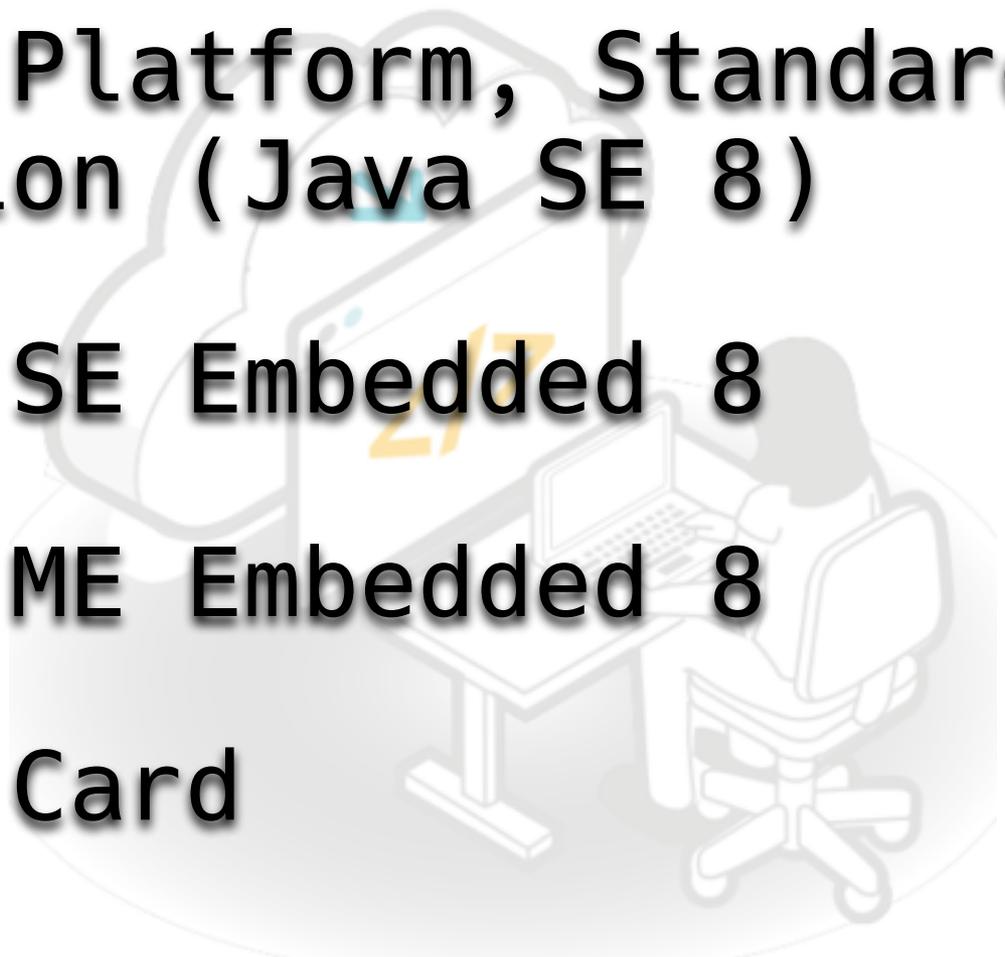
Headless 嵌入式系統



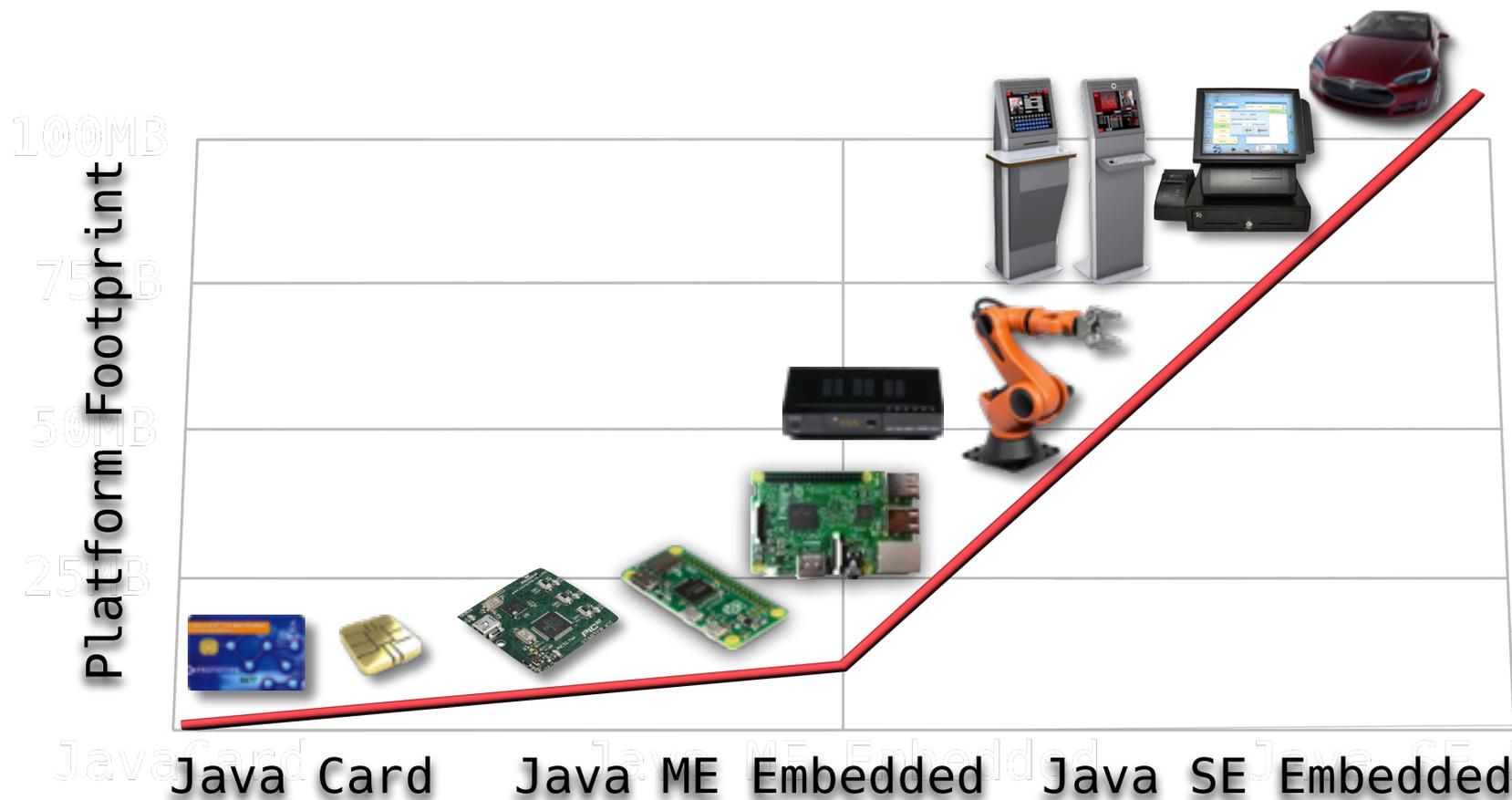
Headful 嵌入式系統



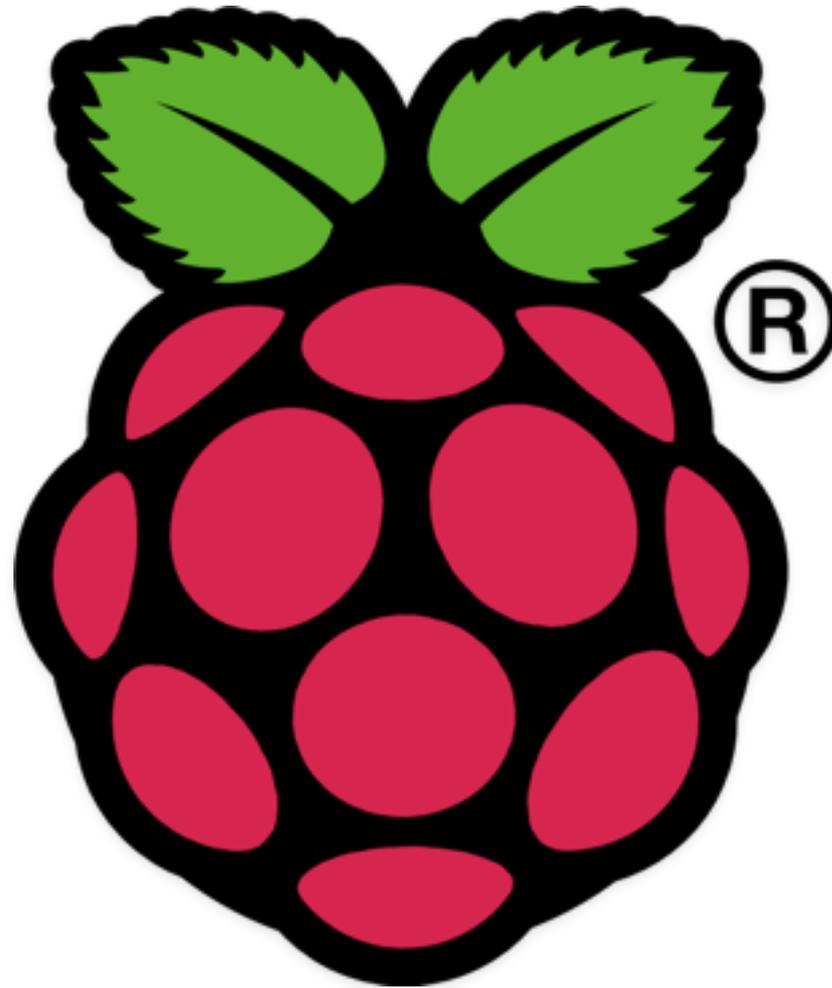
Java 嵌入式系統技術

- Java Platform, Standard Edition (Java SE 8)
 - Java SE Embedded 8
 - Java ME Embedded 8
 - Java Card
- 
- A faint background illustration shows a person sitting at a desk with a laptop, viewed from behind. A large, semi-transparent number '2/7' is overlaid on the scene, indicating the slide number.

Java 嵌入式系統架構



Raspberry Pi

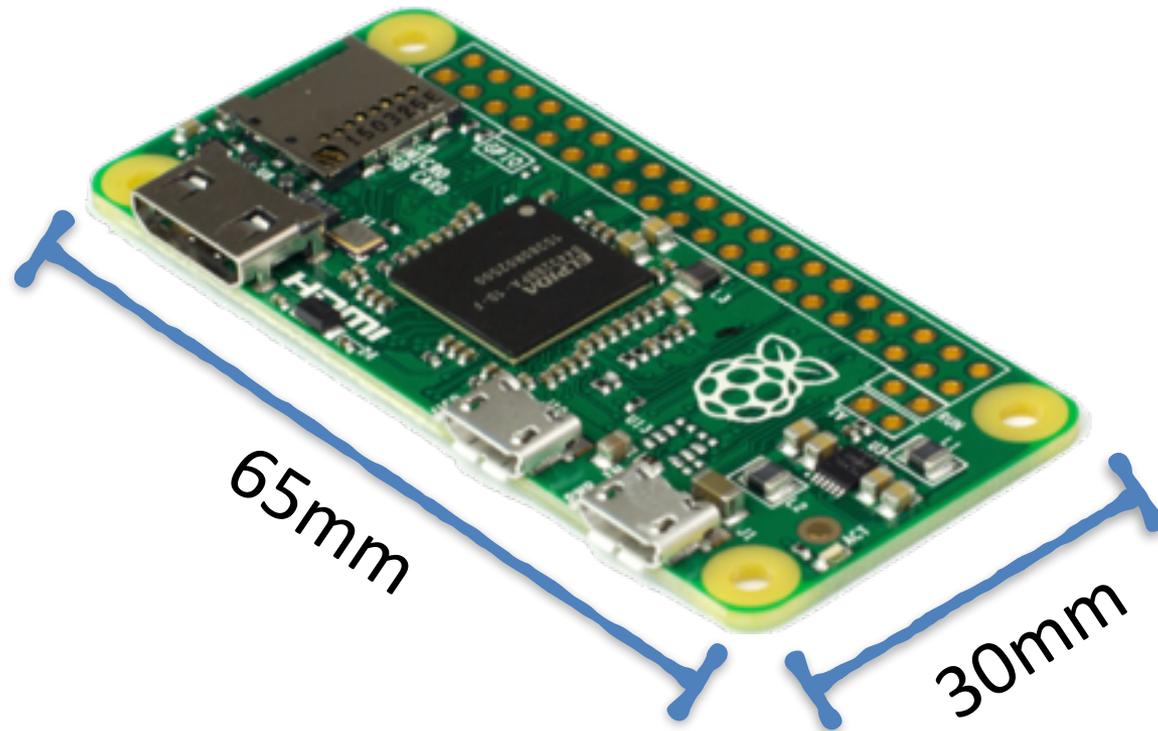


Raspberry Pi

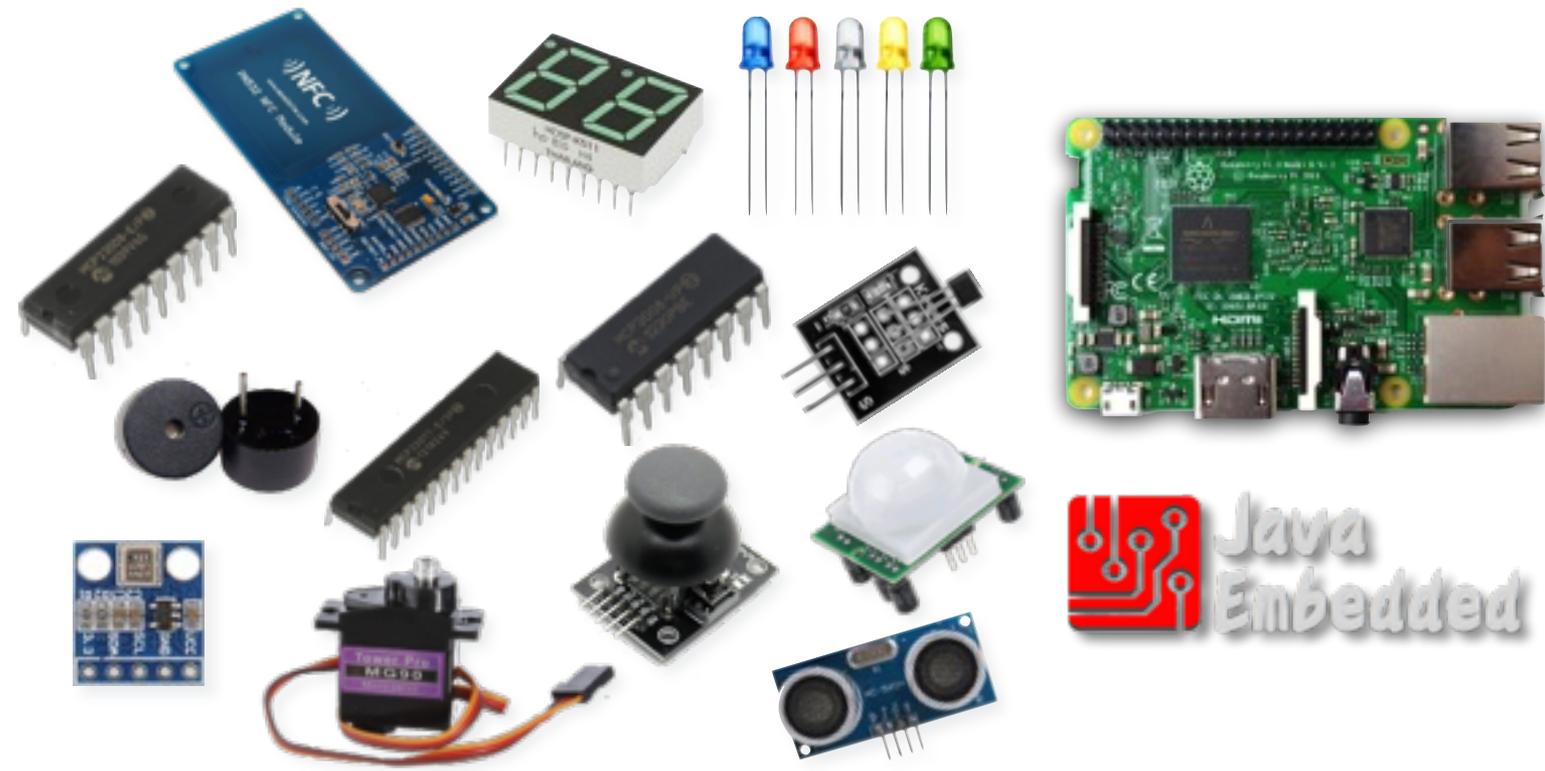
- 非常便宜，像信用卡一樣大的電腦
- 一個功能強大的小型裝置
- 可以用來學習資訊技術與程式設計
- 很容易跟外界互動



Raspberry Pi Zero

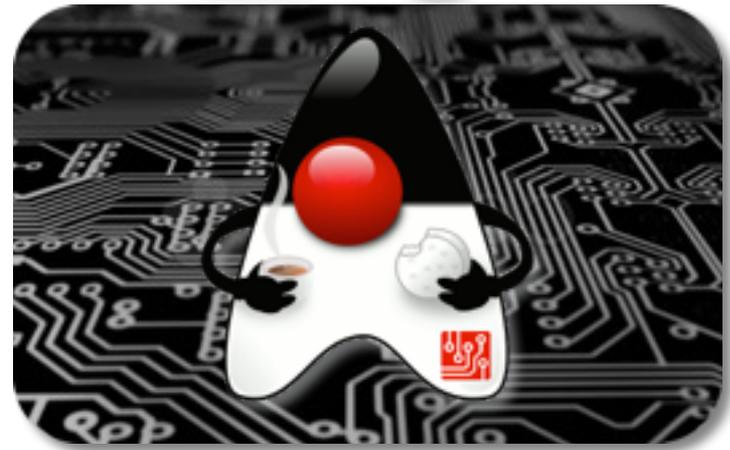
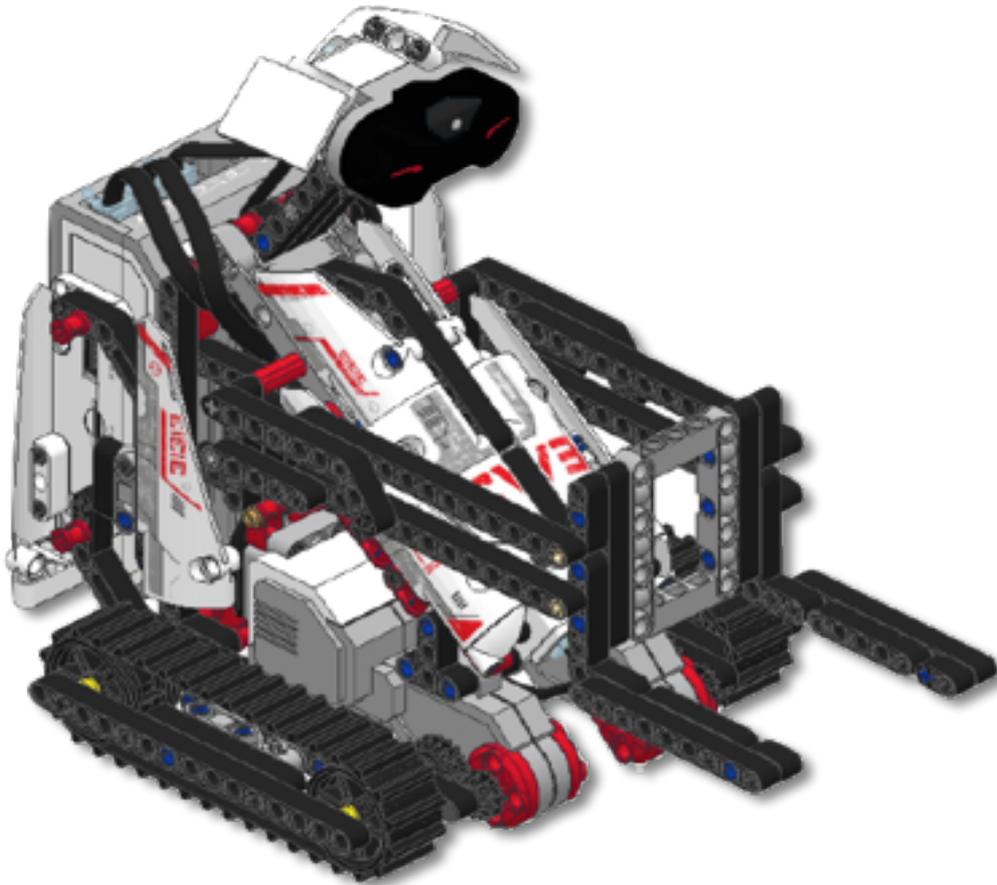


Java 與 Raspberry Pi

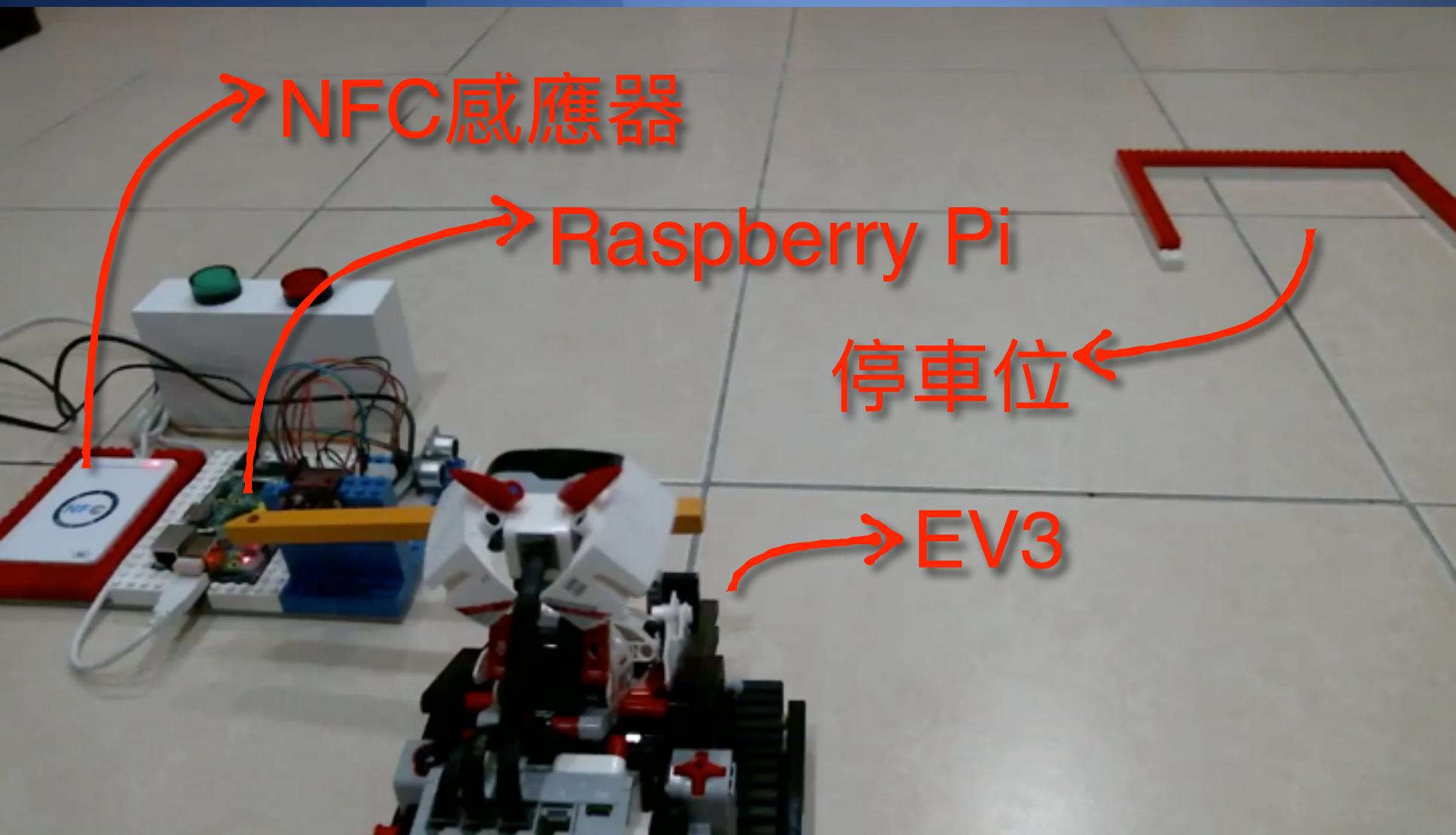


Java Embedded

Java 、 Raspberry Pi 與 EV3



智慧停車系統



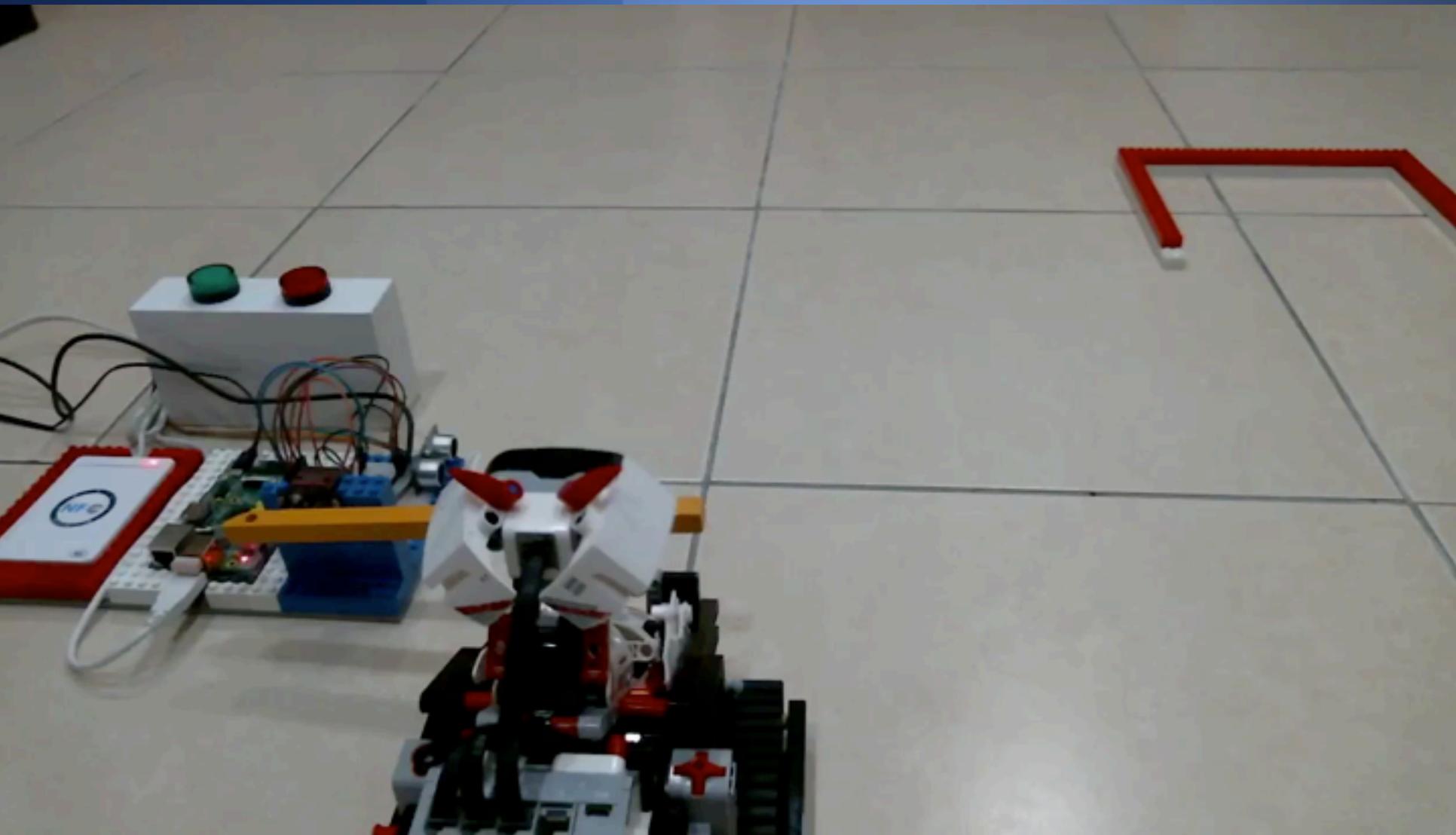
→ NFC感應器

→ Raspberry Pi

← 停車位

→ EV3

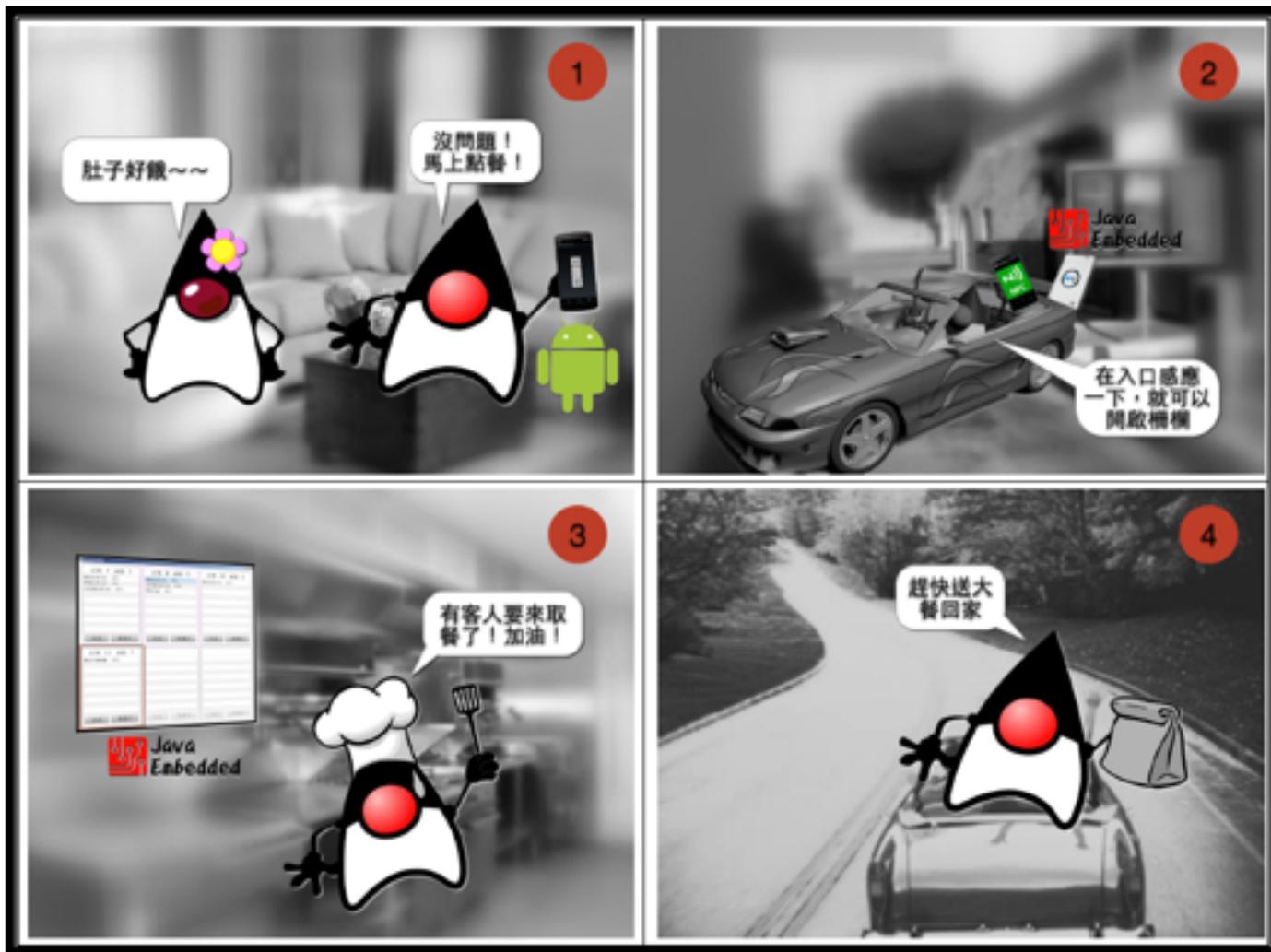
智慧停車系統示範



網路點餐系統



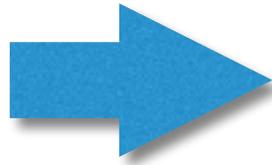
得來速點餐系統



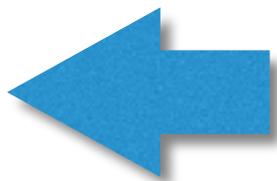
智慧雲端監控系統



即時控制



即時監聽



監控系統示範



Java 可以...

任何你能想像的
包含你的夢想