Designing an Android Device
GPS Locationing and Tracking System for Tourism

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Introduction
This project is to develop an application on mobile devices of GPS Locationing and Tracking System for Tourism. It is done through the process of understanding Embedded Linux Operating System, Android Operating System on Mobile, ARM Development Platform, communications between hardware modules and Graphical User Interface JAVA coding on Eclipse platform.

There are some existing Android applications which use GPS as a tool. This project focuses on Navigation applications. The applications show the current position, the map, some information such as weather and traffic condition, and nearby shops and restaurants.

Methodology
Hardware - OMAP3 DevKit 8000
- Based on ARM Cortex and OMAP3530 processor
- Includes basic interfaces for mobile devices
- Contains touch screen LCD to simulate the environment of a real mobile phone

Software - Android SDK
- Open source mobile OS developed by Google
- Powerful platform for communications, entertainment and navigation
- Excellent resource for mobile app developers

Result
An application on Android devices of GPS Locationing and Tracking System for Tourism is developed. This system can find the tourist's position at regular intervals. Secondly, the mobile device can show where the attractions are with detailed information. Finally, it can promote Hong Kong to individual visitors by providing the user friendly electronic map of Hong Kong.