Mobile-AR Application Contest with Samsung Wave Phone & Workshop

Background and Motivation

As the smartphone supporting a camera, GPS, compass, and Internet as basic functions is burrowing into daily life, mobile AR (Augmented Reality) applications are becoming quite popular. Whether smartphone users know what mobile AR is or not, they are interested in what the mobile-AR killer service in daily life will be. For example, Sekai Camera and Layar open mobile user's eyes to new AR experiences. Sekai Camera allows people to place tags and photos in any location around them. Layar enables people to place digital information on the top of the real world as seen through the mobile phone's camera. Today, mobile users are looking for more mobile AR applications beyond Sekai Camera and Layar.

Objectives

The aim of this workshop is to discover unique and practical ideas and technologies through a mobile AR application contest between worldwide researchers related to the ISMAR conference. In this workshop, the hardware (Samsung Wave phone) and software platform (bada SDK) for mobile AR are going to be distributed free of charge to contest participants. We encourage many developers to take an active part in this workshop in order to find out and share various and valuable mobile AR applications in real life.

How to Participate in the Workshop

The workshop will be organized as mobile-application contest and workshop. The results of the contest will be presented in a plenary of ideas and technologies on mobile AR at the conclusion of the workshop. This workshop will last for one full day and will be limited to 10 participants to enable productive discussions. Participants will be invited on the basis of mobile-AR proposals, which will be selected based on their originality and contribution to the workshop. The proposal should address at least one of the workshop topics and be in the form of a technical paper, experience report, or work-in-progress report.

   In order to participate in the Mobile-AR Application Contest, contestants must submit proposals describing their ideas before the deadline. The proposals may be up to 2 pages in length and must follow standard IEEE style guidelines in PDF format. Then, each selected contestant will be given the hardware (Samsung Wave Phone) and software platform (bada SDK) for mobile AR after reviewing proposals.

   o Proposal Submission (to): jinibini.kim@samsung.com , say.jang@samsung.com

Development Environment to be Supported by Samsung

① Mobile hardware platform (Samsung Wave-S8500)

Samsung Wave (S8500) at a glance

Network	2.5G (GSM / GPRS / EDGE) : 850 / 900 / 1800 / 1900 MHz 3G (WCDMA / HSPA) : 900 / 2100 MHz
Processor	1 GHz
Display	3.3" WVGA (800×480) Super AMOLED with mDNIe
Camera	5.0 Megapixel camera with LED flash
Video	HD (720p) video playback and recording
Software Platform	bada
Value-added Features	Integrated Messaging 'Social Hub'
	Samsung Apps (To be deployed in 50 countries during 2010)
	TouchWiz 3.0 with integrated phonebook, voice, and motion UI
	Dolphin Browser 2.0, One Finger Zoom (up to 10x)
	A-GPS, On/off Board Navigation (3D Map), LBS
	Accelerator Sensor, Proximity Sensor, GeoMagnetic Sensor
	Voice Command, RSS Reader, Communities and Mobile Widgets
Connectivity	Bluetooth v3.0 USB v2.0 (Full Speed) Wi-Fi 802.11 b/g/n
Memory	2GB / 8GB + microSD (Up to 32GB)
Size	118 x 56 x 10.9 mm
Battery	(Standard) Li-Ion, 1,500 mAh

* Product specifications are subject to change without notice.

② Application Open Platform (API Specification)

The bada SDK includes the following namespaces:

App, Base, Commerce, Content, Device, Graphics, Io, Locales, Locations, Media, Messaging, Net, Security, Social, System, Telephony, Text, Ui, Uix, Web, and Xml.

The detailed bada API specification is at the bada developer site, http://developer.bada.com.

Important Dates (2010)

o Proposal Submission: Aug. 14th

o Acceptance Notification: Aug. 21st

o Development Environment Delivery: Aug. 31st

o Camera Ready: Sep. 30th

o Workshop: October (TBD)