



e-gate Smartcard Application Contest

By : Reza Ferrydiansyah

<http://www.smartcards.net/egate/>



Outline

- What is a Smartcard?
- What can a Smartcard do?
- E-gate smartcards
- Smartcard Applications
- E-gate open
- What can we (not) do?

What is a smartcard

- Basically, it is a integrated circuit (IC) on a plastic card.
- Some examples of smartcard are :
 - Cellular Phone SIM-Cards
 - 'CHIP' Telephone cards



Types Of Smartcard

MEMORY CARD

- ✔ Used to Store Data Only
- ✔ May restrict access to reading and writing
- ✔ Comparable to floppy disk

MICROPROCESSOR CARD

- ✔ On-card dynamic data processing capabilities
- ✔ Microcontroller chip that manages memory allocation and file access
- ✔ Card Operating System
- ✔ Comparable to computer

Smart Card Reader



- Readers Read AND Write to Smartcards
- Readers uses the card protocol to communicate with the smartcard

Smartcard Characteristic

- ✔ Can be carried around
- ✔ Can be used for authentication
- ✔ Secure
- ✔ Limited Memory (Max 64 K Including OS and JVM)

Current Smartcard Applications

- Identification Card
- Financial Card
(Cashless Payment)
- Loyalty Scheme
- Storing
Administrative
Information
- digital rights
management
- secure web access

Smartcard Application Characteristic

- Mobile users
- Smartcard for Authenticating
- Smartcard for storing data

What about E-Gate Technology?

- E-Gate card can be directly plugged into a computer without a smart card reader but via USB
- Reduces cost of ownership of infrastructure, maintenance, installation and support
- Compliant with traditional ISO smart card

Two Ways of Deploying



Plug-in token, SIM format
Integrated solution
Key ring format

ISO smart card format
Works on existing terminals
Branding space
Fits in wallet

E-gate Open

- ✔ challenges contestants to develop new e-business ideas of the future using e-gate USB smart cards
- ✔ Business to consumer applications
- ✔ Solutions for accessing on-line services
- ✔ Citizen and everyday applications

Possible Topics

➤ Digital identity

➤ E-government

➤ E-transactions

➤ E-learning

➤ Electronic signatures

➤ Entertainment

Contestant

- ☞ scientific engineering schools, universities and business schools.
 - applications to be made by directors representing one team of students (including researchers) supervised by members of the teaching staff
- ☞ companies specialized in electronics, computer sciences or Java language or other software companies or integrators

Other Info

- ☞ www.smartcards.net/egate
- ☞ 15 th June. Proposal deadline
- ☞ If proposal is approved, then start programming
- ☞ Team Leader Must have a Bandung ID card (KTP Bandung)

Contact

☞ For further information, please contact

- Ketut Mahaindra

- kmahaindra@beijing.sema.slb.com

- ketut@mahaindra.com

- Reza Ferrydiansyah

- reza@informatika.org

☞ Discussion will be opened in

- <http://forum.mahaindra.com/informatics>