Work done and Issues Raised for the Blue Weasel project

By Andréi BROUSSILLON, Bastien CARRE, Boris LENG & Lyvia LOUISIUS

**September 25th 2012:**

* First meeting with supervising professors
* Presentation of the project and its goal
* Gathering of the necessary material : 4 PEGODA Smart Card Readers, 41 untested cards

**October 9th and 10th 2012:**

* 2nd meeting with professors regarding the material we need to order for our project : 2 Nexus 7 tablets, 100 RFID stickers and 3 card decks (32, 54 and 78 cards)
* Mr. Lamine BOUGUEROUA will order the tablets and Mrs. Elizabeth COLIN will try to find a low cost supplier for the RFID stickers
* We decided what our first tasks were going to be to start writing the functional requirements of the project and to start trying to interact with the PEGODA readers with a computer.

**October 15th 2012:**

* Downloading of all the software and documentation related to the PEGODA available on the Internet
* Installation of the drivers for the PEGODA readers on two personal laptops while waiting for a school computer to be prepared
* Updating the 4 PEGODAs’ firmware
* Relations established between the Serial Number written on each PEGODA box and the Serial Number displayed by MIFARE Wnd when it communicates with the PEGODA. Here they are:

|  |  |
| --- | --- |
| Box Serial Number | Software Serial Number |
| 701 051 05 | **69D3 AA53** |
| 701 051 10 | **41D3 AA53** |
| 701 051 11 | **3BCE AA53** |
| 701 051 12 | **21D6 AA53** |

* Testing of the 41 cards : 34 are recognized by the PEGODA readers
* Reorganizing of the project room in order to have more space available to work
* Learning of the Belote card game which we will implement in our application because of the small number of cards and the fix number of players.

**Issues:**

* The MIFARE Wnd software cannot communicate with several readers at the same time

**October 19th 2012:**

* Testing of 2 other pieces of software to communicate with the PEGODAs : MIFARE Discover and DesfireUI
* Search and reading of documentation about DesfireUI

**Issues:**

* Difficult to read more than 4 cards simultaneously because they are too close one from another
* The PEGODA can only read cards that are at a distance of 7,5 cm vertically above the antenna
* No software can communicate with several readers at the same time
* Documentation is difficult to find

**October 24th 2012:**

* Writing of the Functional Requirements for the Blue Weasel project
* More testing with the 3 pieces of software
* Writing of this document
* Meeting with supervising professors when we explained the issues we encountered.
* We interacted with 3 different PEGODAs on the same computer, using the 3 pieces of software at the same time.
* With Mr. BOUGUEROUA, we went through the code we have at our disposition to interact with the PEGODAs.
* Mrs. COLIN said that she would try to get in touch with a connection who knows more about PEGODAs

**Issues:**

* A lot of code to go through to find the methods that we want to use
* We need more information about how we can customize the PEGODAs to read more cards at the same time

**November 5th 2012:**

* Drawing of a diagram of the application’s ergonomics for the virtual player and the real player
* Setting up Github accounts to enable us to work on the same code without conflicts, using the Egit plug-in for Eclipse.
* Designing of the database schema that the application will use
* Installation of plug-ins for Eclipse to develop Android Apps and testing them with our tablets

**November 6th 2012:**

* Continuation of what was done the day before
* Creation of a first test Android App

**November 12th 2012:**

* Continuation of ergonomics and first review of the Functional requirements by Mrs. COLIN
* Writing of an additional part in the Functional Requirements giving more details about the actions involved in a “Belote” game using the Blue Weasel application
* Setting up two additional computers for development purposes

**November 19th 2012:**

* Finalizing of the Functional Requirements
* Continuation of the test Android App development
* Research on how to link Java code with C++ code used by the Pegoda libraries

**Issues:**

* Difficulties to use the C++ methods because they take C++ classes in parameters

**November 30th 2012:**

* Reading of documentation on Pegodas given by Mrs. Colin’s contact at NXP

**December 10th 2012:**

* Putting together the Functional Requirements and the State of the Art to prepare the PowerPoint presentation
* Rehearsing before the presentation