Manchester Metropolitan University

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Title: User Guide:
Distributing and Running the Student Information Kiosk

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User Guide

Before Running the Student Information Kiosk System

As the Student Information Kiosk system is designed to work over a network it is required that the client know the location (preferably the IP address, or simply a computer name if running over a local network) of the server and the port number that the server is running on. Currently the server is set to listen on port 1099 which should be a free port on most networks and is the default RMI port, in which this system uses the RMI protocol for client/server communication.

The clients (on the Student Information Kiosk Interface GUI and Student Records Administration GUI) are set up to connect to the server on that port and is currently set to locate the server on IP address: 127.0.0.1 which is a local loop back address which can be used if running the client and server on the same machine. If you wish to use the client and server over a network then you need to change the server IP address in the **ClientOptions.txt** file which is located in the 'SIK-Client-User' and 'SIK-Client-Admin' folder in the 'Implementation/Workspace' folder on the CD. This may be the IP address of the server or alternately the name of the computer running the RMI Server if running over a local network. If you wish to change the port number then you need to change these in both the **ClientOptions.txt** file and also the **ServerOptions.txt** file. The serverOptions.txt file is located in the 'SIK-Server folder inside the 'Implementation/Workspace' folder on the CD.

The address should look something like this:

```
//127.0.0.1:1099/RMIServer
```

'RMIServer' is the name given to the RMI Server object which is bound the RMI registry, which can be changed but it needs to be the same in both the **ServerOptions.txt** and **ClientOptions.txt** files.

Installing the 'Phidgets' Library for the use of the RFID Scanner

Before you can run the Student Information Kiosk you will need to install the Phidgets (RFID Scanner API) C++ library files to the working machine, regardless of whether the RFID scanner is to be used or not.

The installation files are found in the folder in the CD:

Implementation\Phidgets

The file that needs to be run is:

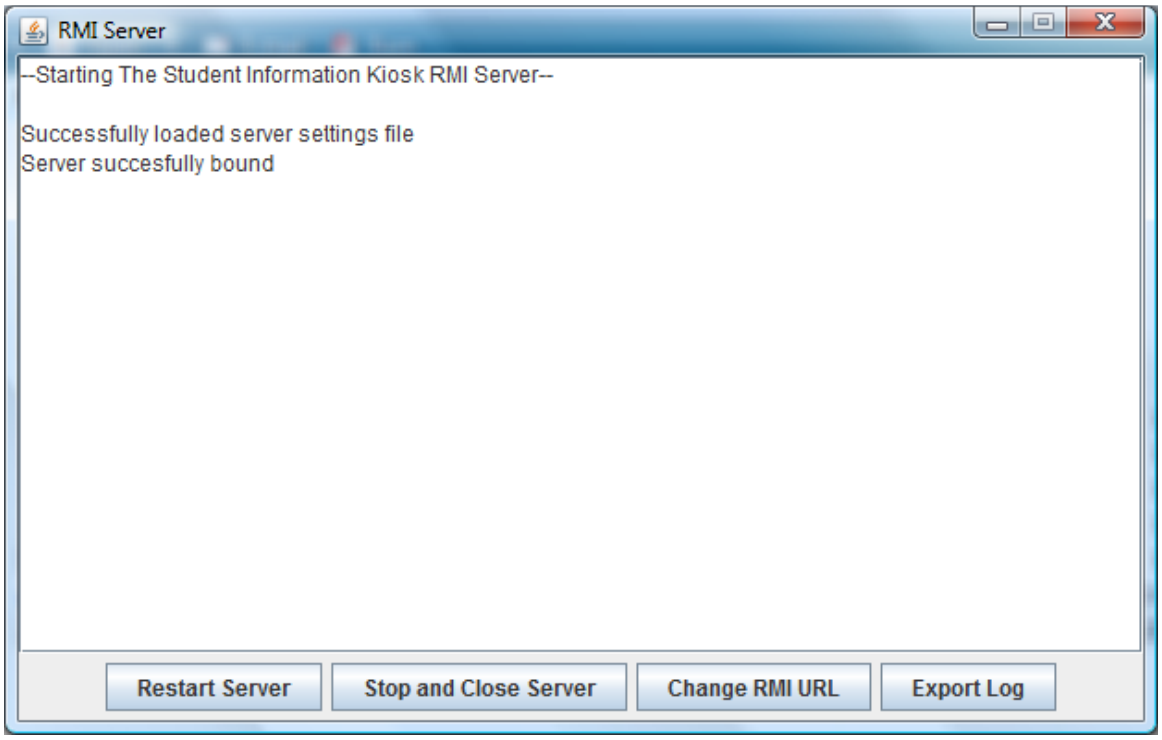
- Implementation\Phidgets \Phidget-x86_2.1.7.20100803 (if using 32-bit Windows)
- Implementation\Phidgets \Phidget-x64_2.1.7.20100803 (if using 64-bit Windows
- Phidgets\Phidgets-LinuxSource\configure (if using Linux)

Running the RMI Server (Needs to be done first before the client can connect):

Simply double click one of the following files:
- Implementation\Workspace\SIK-Server\SIK-Server.jar
- Implementation\Workspace\SIK-Server\SIK-Server.exe
- Implementation\Workspace\SIK-Server\SIK-Server.bat (will also show a consol window)

The .bat file shows a console windows as if the program was run from a consol window, in which can be used to obtain additional message of what the program is doing and will display any error messages if there are any which contain more details as compared to the error messages displayed in the GUI.

When running the RMI Server it should load up a 'server logger GUI' which can be used to control the server, export a server log and view server messages (i.e. what task the server is currently performing):



Please note, only one RMI server can be run at a time, otherwise the server cannot be successfully bound to the RMI registry, which is required in order for the RMI server object to be found by the RMI client. Additional RMI servers maybe run, but the name of the RMI server object and port number would need to be changed in the **ServerOptions.txt** file.

Running the Student Information Kiosk GUI

Simply double click on of the following files:
- Implementation\Workspace\SIK-Client-User\SIK-Client-User.jar
- Implementation\Workspace\SIK-Client-User\SIK-Client-User.exe
- Implementation\Workspace\SIK-Client-User\SIK-Client-User.bat (will also show a consol window)

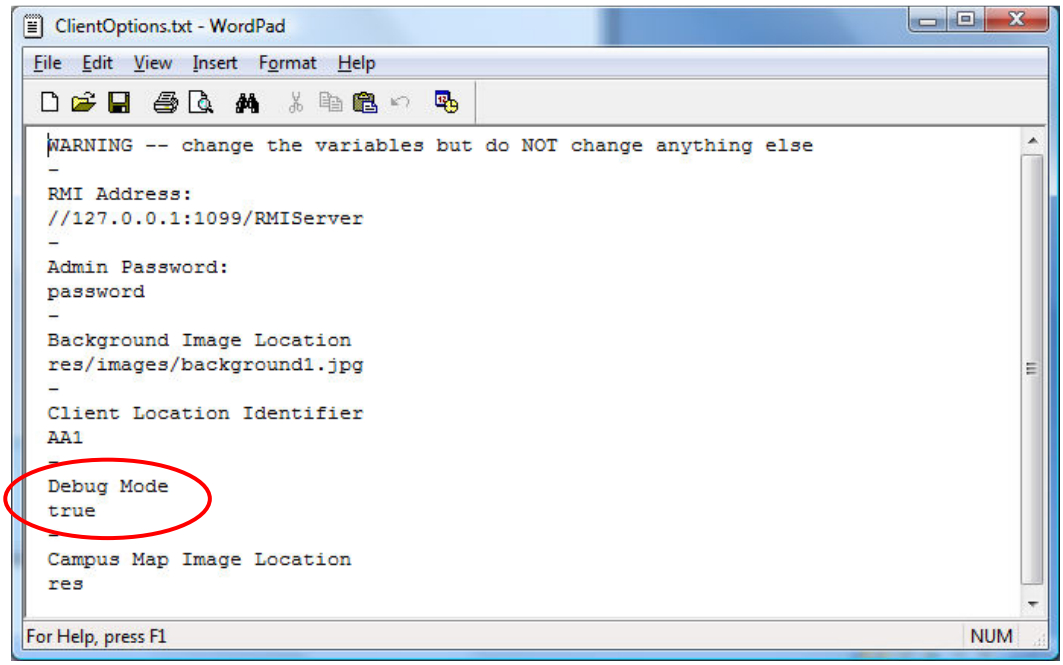
The .bat file shows a console windows as if the program was run from a consol window, in which can be used to obtain additional message of what the program is doing and will display any error messages if there are any which contain more details as compared to the error messages displayed in the GUI

For testing purposes you may use the student ID number: **4000001** (5 zeros) and pin number: **1234** when logging into the interface using the manual pin entry method.

Running the Student Information Kiosk GIU on the Samsung Q1

One thing to be aware of if attempting to the run the Student Information Kiosk GUI on the Samsung Q1 is 'window decoration'. Window decoration basically means that the application is contained within a window frame, which can then be used to move the application around the desktop, minimize and maximize the window and close the application.

The window decoration can be turned on and off for the Student Information Kiosk via the **ClientOptions.txt** file by changing the value below 'debug mode' to either true or false. When debug mode is set to true, the kiosk will include window decoration. When set to false it won't.



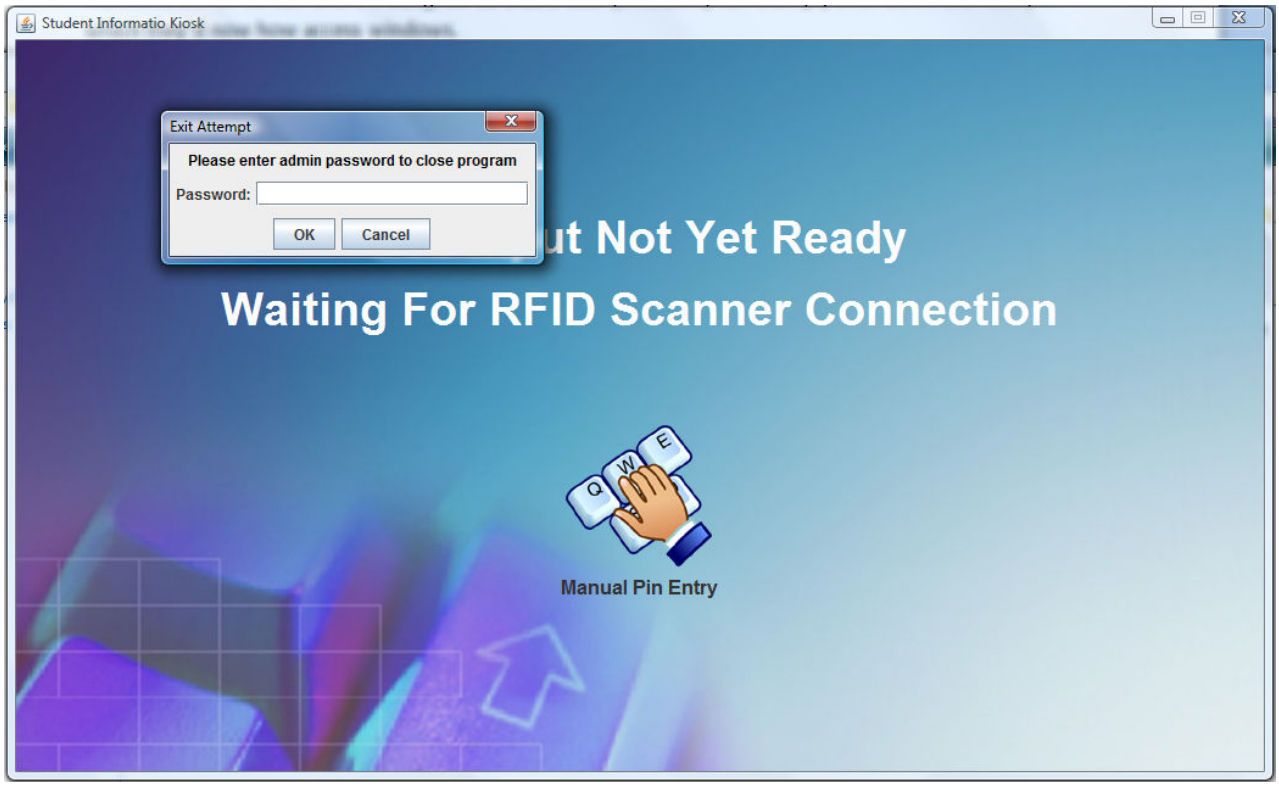
Why turn window decoration on and off? Because when running the kiosk on the Samsung Q1 you ideally want it to be full screen and it's designed so that a user (a student) can't simply shut down the kiosk, in which they'd now how access to the operating system.

Turning the Student Information Kiosk 'Off' when it is in Full Screen Mode on the Samsung Q1

Of course, when you turn the window decoration off you can no longer close the interface; which is why a hot key has been assigned to the GIU.

If you press **'q'** key on the keyboard it will display a dialog requesting a password to quit, again this is for security purposes so a user can't close down the kiosk.

The password is currently set to '**password**', which, when entered press the ok button and the interface will close:



This password can also be changed in the **ClientOptions.txt** file

Also, if you press the '**r**' key on the keyboard the same dialog will appear, however once the password has been entered another dialog will appear that will allow you to change the RMI location to the RMI server with having to alter the clientOptions.txt file.

Running the Student Records Administration GUI

Simply double click on of the following files:
- Implementation\Workspace\SIK-Client-Admin\SIK-Client-Admin.jar
- Implementation\Workspace\SIK-Client-Admin\SIK-Client-Admin.exe
- Implementation\Workspace\SIK-Client-Admin\SIK-Client-Admin.bat (will also show a consol window)

The .bat file shows a console windows as if the program was run from a consol window, in which can be used to obtain additional message of what the program is doing and will display any error messages if there are any which contain more details as compared to the error messages displayed in the GUI

Importing Projects into Eclipse

1. Open up eclipse
2. Go to file -> import
3. Within the 'General' folder, select 'Existing Project into Workspace'
4. Click 'Browse'
5. Within the 'Implementation/Workspace select which project to import and click 'import'

You can also use the 'switch workspace' option from the file menu in eclipse to point to 'Implementation/Workspace' which would present all the projects in the workspace.

Distributing the Projects

To distribute a project to a elsewhere such as to a different machine, simple go to the 'Implementation/Workspace' folder on the CD then right click and 'copy' the desired project and paste it to your desired location. Each folder in the workspace folder is an individual project that isn't referenced to any other project; therefore you can deploy just the server in one location and the information kiosk in another without having the copy the entire project**.** It is very important however if you wish to import the project into eclipse from the new location to also copy the **'SIK-Common'** folder, which is used in development and in which all other projects are referenced to it.