



Advanced Card Systems Limited

Card and Reader Technologies

Visitor Management System Manual

ACR122U NFC Reader





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1.0 Introduction

The ACR122 NFC Reader can be used in a wide range of contactless solutions and this application simulates a Visitor Management System which can be used for tradeshow and other registration systems. The application is divided into two modules namely the Registration and Exhibitor Module.

1.1 Registration Module

In the Registration Module details of the user will be inputted then saved in a contactless smart card. Since the ACR122 supports ISO 18092 tags and ISO 14443 tags, you can choose from a wide variety of contactless card to use for your application, however, for this specific application, Mifare 1K card will be used. The program flow is summarized by the flow chart below.

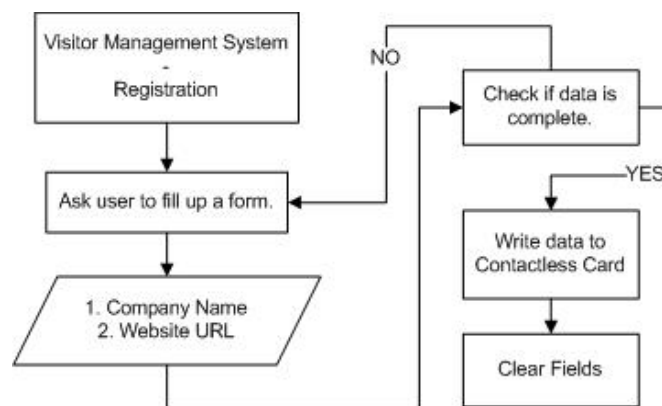


Figure 1 Registration Module Flow Chart

1.2 Exhibitor Module

The whole application simulates a tradeshow registration system where visitors are first registered in the Registration Area. When a visitor drops by the booth, he/she can tap the card and the information will be saved in an excel file for the Exhibitor's reference. The program flow is summarized by the flow chart below.

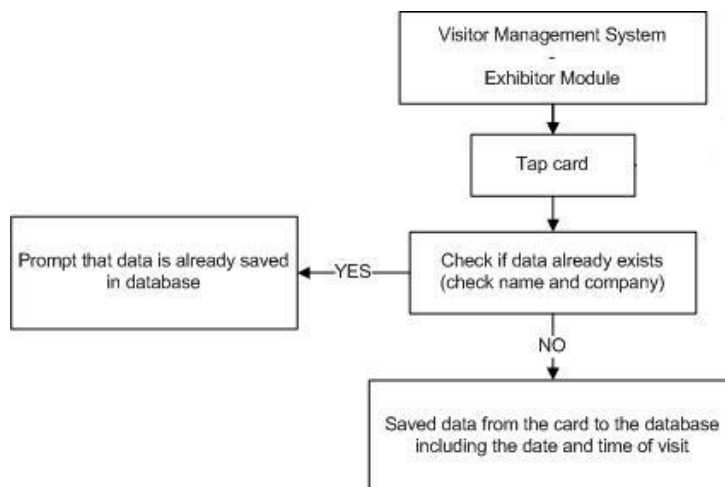


Figure 2 Exhibitor Module Flow Chart



2.0 Demo Application Requirements

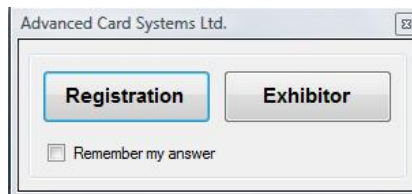
You need to have the following to be able to use the application.

1. .NET framework - You need the .NET framework to run the application. Please refer to the SDK User Manual on how to install the .NET framework in your machine.
2. MS Excel – You need this to open the database in Excel Form
3. MS Access – This is not necessary but if you would like to open the *.mdb file you need to use MS Access.

3.0 Using the Visitor Management System Application

3.1 Registration Module

1. In the main menu click on the Registration button.



2. The Registration Module will open. Place the card on top of the reader.

A screenshot of a software window titled "Visitor Management System - Registration Module". The window has a menu bar with "File". Below the menu bar, it says "Powered by" followed by the ACS logo and "Advanced Card Systems Ltd" and the website "www.acs.com.hk". The main form area contains the following fields: "ID: (Auto Generated Value)" (disabled), "Company Name:" (text box), "First Name:" (text box), "Last Name:" (text box), "Position:" (text box), "Email Address:" (text box), "Location:" (dropdown menu), and "Company Website:" (text box). At the bottom of the form are two buttons: "Register" and "Clear". Below the form area, it again says "Powered by" with the ACS logo and "Advanced Card Systems Ltd" and "www.acs.com.hk". At the very bottom of the window, a status bar reads "Reader: ACS ACR1220 | Card is present."



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3. Details of the participant should be inputted. Click on the Register button.

Note: The Clear button will only clear the fields in the application.

The screenshot shows the 'Visitor Management System - Registration Module' window. It contains a form with the following fields: ID (Auto Generated Value), Company Name (Advanced Card Systems Ltd), First Name (Richelle), Last Name (Arjona), Position (Product Marketing Engineer), Email Address (richelle.arjona@acs.com.hk), Location (Philippines), and Company Website (http://www.acs.com.hk). There are 'Register' and 'Clear' buttons at the bottom. The footer shows 'Powered by ACS Advanced Card Systems Ltd www.acs.com.hk' and 'Reader: ACS ACR1220 Card is present.'

4. When registering a participant for the first time, a pop-up window will appear informing you whether or not you want to create the database. Click on the Yes button. The application will automatically create the database.

The screenshot shows the same registration form as before, but with a 'Create Database' pop-up window. The pop-up window contains the text: 'Database (acs.mdb) does not exist. Create?' with 'Yes' and 'No' buttons. The background form is partially obscured by the pop-up.

5. A pop up window will appear once the data is successfully saved in the contactless card and the database.

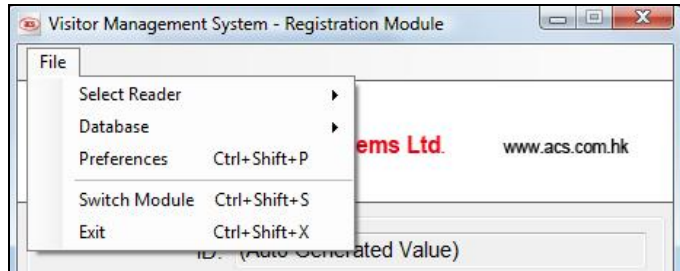
The screenshot shows the same registration form, but with a 'Register' pop-up window. The pop-up window contains the text: 'Successfully Registered!' with an 'OK' button. The background form is partially obscured by the pop-up.



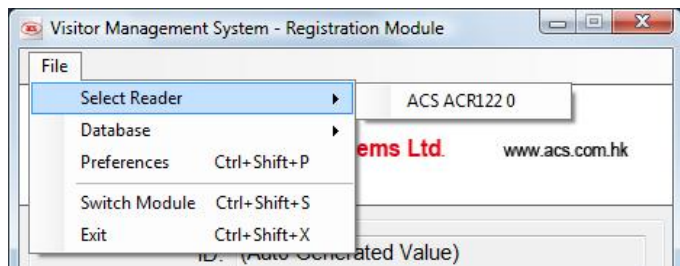
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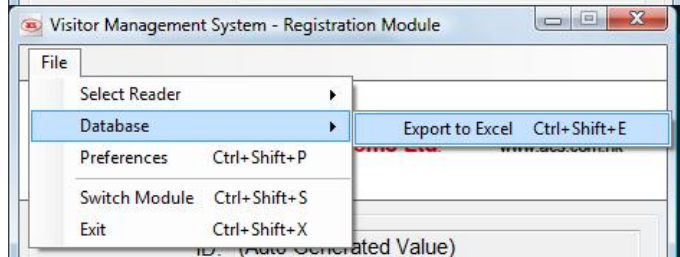
6. There are other options that can be used in the Registration Module under the File Menu.



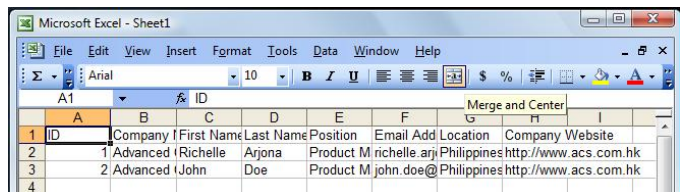
7. If you have several ACR122U NFC Readers connected to your computer, this option will allow you to choose which device you want to use.



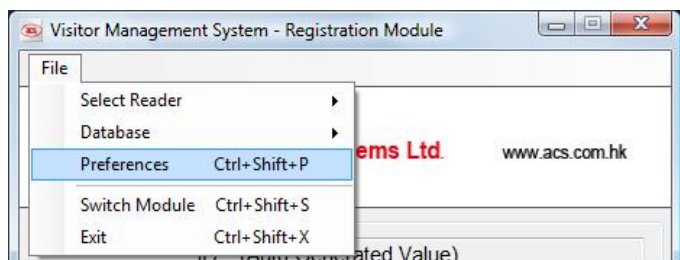
8. This option allows you to export the database into Excel Form.



If you click on the Export to Excel option an Excel Worksheet will appear containing the data for all the registered users.



9. Under the File Menu, you can also click on the Preference button which will open the Registration Settings Window.





10. In this window, you can modify the settings.

Database Settings

Filename – Excel File where the data will be saved.

Table Name – The name of the table in the Database.

Username – username that will be used to access the database.

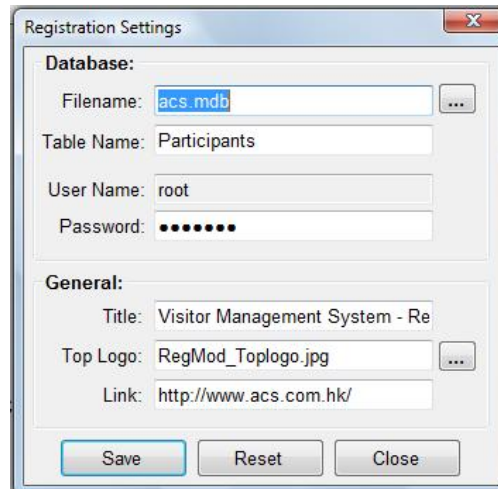
Password – password of the username specified.

General Setting:

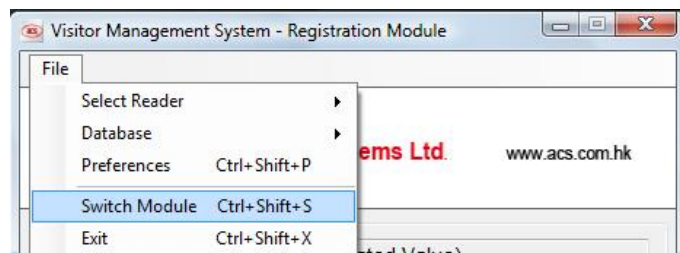
Title – Caption/Text that will be displayed in the top corner of the main window

Top Logo – Image (JPG) that will be displayed on the top portion of the main window.

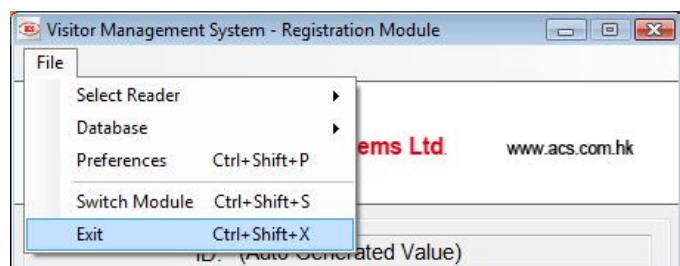
Link – a URL that will be opened when you click the top image of the main window.



11. As the name of the Switch Module implies, it allows you to switch between the two modules of the application.

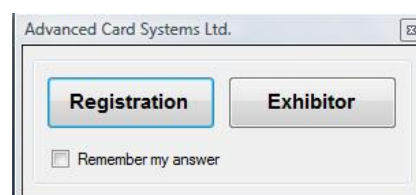


12. The Exit Option closes the application.



3.2 Exhibitor Module

1. In the main menu click on the Exhibitor button.





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2. The Registration Module will open.
Place the card on top of the reader.

3. When the application is used for the first time, a pop-up window will appear informing you whether or not you want to create the database. Click on the Yes button. The application will automatically create the database.

4. You will see the information stored in the card. This data is saved in an excel file.



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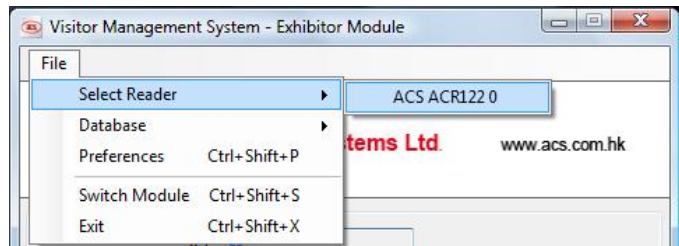
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5. If you tap the same card again on the exhibitor module, a warning message will appear. It gives you the option to save the data twice in the excel file or not.

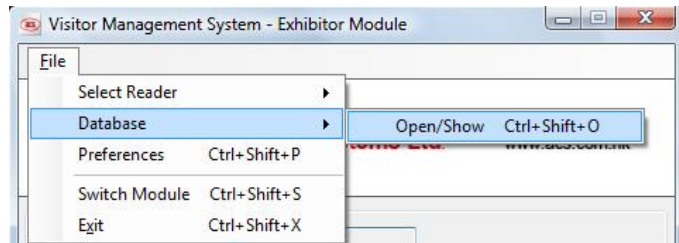


6. There are other options that can be used in the Exhibitor Module under the File Menu.

If you have several ACR122U NFC Readers connected to your computer, this option will allow you to choose which device you want to use.



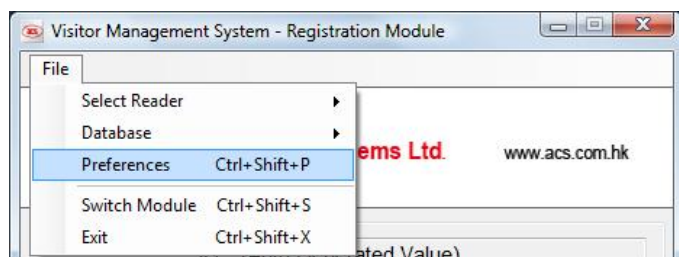
7. This option allows you to open the database which is in Excel Form.



The Excel Worksheet on the right is the database that contains the details of the participants who drop by the Exhibitor's booth.

ID	Company	First_Nam	Last_Nam	Position	Email_Add	Location	Company_Website
1	Advanced	Richelle	Arjona	Product M	richelle.arj	Philippine	http://www.acs.com.hk
2	Advanced	John	Doe	Product M	john.doe	Philippine	http://www.acs.com.hk
3	Advanced	Richelle	Arjona	Product M	richelle.arj	Philippine	http://www.acs.com.hk
4	Advanced	Richelle	Arjona	Product M	richelle.arj	Philippine	http://www.acs.com.hk
5							

8. Under the File Menu, you can also click on the Preference button which will open the Registration Settings Window.





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10. In this window, you can modify the settings.

Database Settings

Filename – Excel File where the data will be saved.

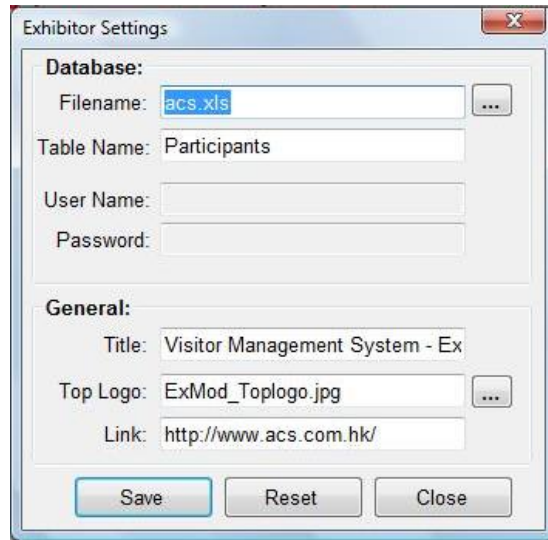
Table Name – The name of the Sheet in MS Excel file.

General Setting:

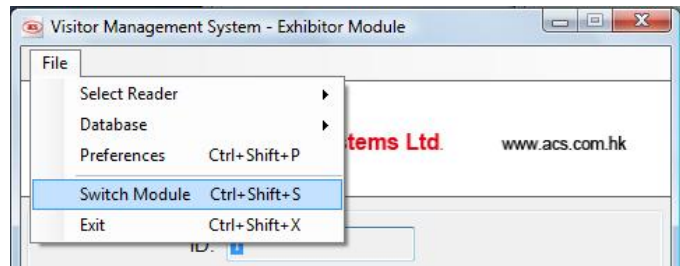
Title – Caption/Text that will be displayed in the top corner of the main window

Top Logo – Image (JPG) that will be displayed on the top portion of the main window.

Link – a URL that will be opened when you click the top image of the main window.



11. As the name of the Switch Module implies, it allows you to switch between the two modules of the application.



12. The Exit Option closes the application.

