

A Pocket PC Application

Mobile and 3G Applications are becoming an everyday requirement now. This is made possible by the developments in mobile communication such as GPRS, 3G etc. and the availability of tools for such application development.

CCS has acquired the knowledge in Mobile Computing Technology and developed an application for a mobile team for registering their attendance data through a mobile phone or pocket PC.

This application enables the team members to punch 'IN/OUT' their attendance from their mobile phone. The application was developed in MS.Net environment.

Process flow:

Pocket PC / Windows Mobile 5 / CE.net phone terminals running a local application for time writing.

Phone runs a local pocket-SQL CE

Phones need to synchronize the reference database on the back-office system with the local 'on phone' database using GPRS / UMTS / whatever wireless Internet connection available on the phone.

Employees start up their Pocket PC phone, and then start the time writing application.

Time writing application offers three choices: start attendance / end attendance / start job costing registration.

Start attendance generate an attendance registration, direction 'IN', mentioning the employee number and start date and time. Registration will be stored in the back-office database using Internet connection, or if no Internet connection is available, stored locally for later synchronization (when internet is available again).

End attendance does exactly the same, direction 'OUT'.

Start job costing registration offers a screen where people are able to select the job or project they start their work on. After selecting job/project there's a second screen where they can select the job type / action they're going to start working on. Same type of 'back-office through the internet' or local storage for later (but not much later) synchronization required.

In addition to the above, the system has got many other functions at the BackOffice server.

We did a pilot application for demo. The same is explained below.

The pilot application appears in the device emulator, as shown in **Figure 1**.



1. After the **EditViewDialog** form appears, enter data for a new record.



Figure 2

2. Click **OK** to save the data. Notice that the **Employee Registration** form's DataGrid is updated to reflect the new record that you entered, as shown in **Figure 3**.

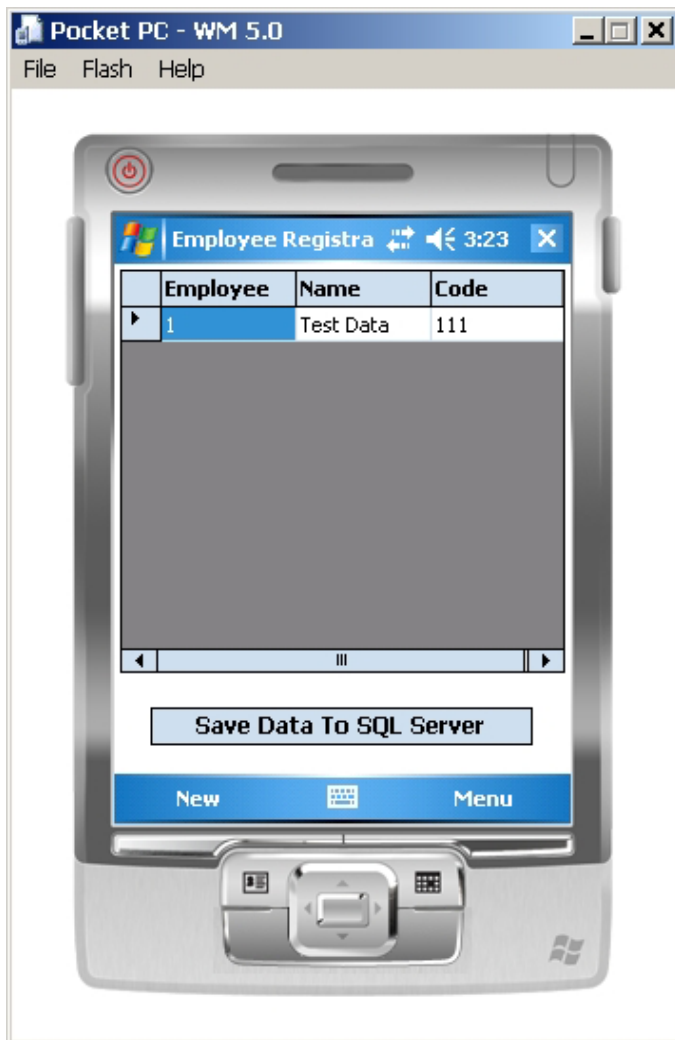


Figure 3.

3. We can edit the data by clicking a row in the Data Grid.
4. Notice that the Summary View Dialog form appears with the details of the row that you clicked, as shown in Figure 4.



Figure 4.

5. Click Edit to open the data form that you can edit, as shown in Figure 5.



Figure 5

6. After the Edit View Dialog form appears, modify some of the data, and then click OK to save it. Notice that the Employee Registration form's Data Grid is updated to reflect the data changes you made, as shown in Figure 6.



Figure 6.

7. Finally click Save Data To SQL Server, save the data to backend SQL Server (Synchronize data between your mobile database and a backend SQL Server database) and you get a message "OK". Then all data disappear Employee List form's DataGrid.
8. Click OK to close the form and the application.