

1) What is .NET Compact Framework ?

The Microsoft .NET Compact Framework is a version of the .NET Framework that is designed to run on mobile devices such as PDAs, mobile phones and set-top boxes. The .NET Compact Framework uses some of the same class libraries as the full .NET Framework and also a few libraries designed specifically for mobile devices

2) How to develop smart device applications ?

With Visual Studio.NET 2003 and also Visual Studio.NET 2005 we can develop these type of applications. These IDE's provide templates to start development and provides simplified approach for deploying them also.

3) To be able to run applications powered by the .NET Compact Framework what the platform should support ?

Microsoft .NET Compact Framework runtime

4) Can I deploy a .NET Compact Framework 2.0 application to a Pocket PC 2002?

No, .NET Compact Framework (CF) 2.0 supports Pocket PC 2003 and upwards only. For previous versions you should continue to develop with CF 1.0 and Visual Studio 2003

5) What do you mean by Smart Client?

Smart clients are client applications that consume Web services and reside on user hardware such as desktop PCs, laptops, Pocket PCs, and Smartphones. They are easily deployed and managed and provide an adaptive, responsive, and rich interactive experience by taking advantage of the computing resources on the device and intelligently connecting to distributed data sources. .NET supports Mobile,smartphone,PDA and pocket pc development as smart client development.

6) How to develop mobile applications and run in .NET ?

Mobile application development can be done using Mobile application template in VS.NET 2003 or by adding new item called mobile form in 2005. A form will be displayed where you can place controls write code and execute it using browser. Microsoft Mobile Explorer is a tool available to run mobile applications. We can use web services and program a mobile application efficiently.

7) What is a Emulator & how it is related to .NET development ?

The Emulator for Microsoft Windows CE .NET is a tool you can use to develop, test, and debug a Windows CE-based platform and applications. On a development workstation, the tool emulates the hardware of a Windows CE-based device. Device Emulator Manager is a program that allows to manage these devices.

8) What is Active Sync ?

ActiveSync is the synchronization program provided by Microsoft for Windows Mobile and other Windows CE-based devices. It can be used while developing smartphone and pocketpc applications to synchronize or copy paste files between emulator and system.

- 9) Can the .NET Compact Framework run all .NET languages?

Initially the .NET Compact Framework will run Visual C# and Visual Basic. Other .NET languages will also run as long as they conform to the subset of the common language runtime that the .NET Compact Framework supports

- 10) What's the difference between the .NET Compact Framework and the ASP.NET Mobile Controls?

There are two different approaches to programming devices. One approach is to place the application on the smart device. The other approach is to place the code on the server and present the user interface via a browser. The .NET Compact Framework enables the former, and the ASP.NET Mobile Controls (formerly known as Microsoft Mobile Internet toolkit) enables the latter.

Building mobile applications using code on the device enables an application to continue to function in the absence of an Internet connection. Applications that run directly on the device also enable much richer user interfaces, as well as the opportunities to integrate with assets available on the operating system, such as multimedia and other applications. Using the .NET Compact Framework enables a highly productive model for building smart device applications.

Building mobile applications where the code lives on the server also has its advantages. This architecture is highly useful for when the widest range of Internet-enabled mobile devices must be reached. These applications are also not limited in resources, since they run on the same servers as desktop Web applications. Authoring these applications is accomplished using the ASP.NET Mobile Controls within Visual Studio .NET.

- 11) What is Windows Mobile and its current version ?

Windows Mobile is Microsoft's software platform for Pocket PCs and Smartphones. Windows Mobile extends the familiarity of the Windows desktop to personal devices.

- 12) What is the difference between a Pocket PC and a smartphone ?

A Smartphone is designed primarily as a phone device in both form factor and usage. It is well tuned for making and receiving calls and as a messaging device. A Pocket PC is designed primarily as a small personal computer which is . great for viewing and managing data and enhanced messaging. Some Pocket PC devices also have phone capabilities. You should try to align your application with the usage characteristics of your

target Windows Mobile device. .Net has good support for both these type of applications.

13) Can we use web services from smartphone applications ?

Yes. Infact using web services is highly preferred during smartphone application development.

14) How is memory managed in the .NET Compact Framework?

Automatic memory management is one of the services that the CLR provides during Managed Execution. The CLR garbage collector manages the allocation and release of memory for an application.

15) What is SQL SERVER CE ?

It is the compact edition of SQL Server that can run on smartphones , pocket pc's and others and provide db facilities to the application. In other words it is for mobile and embedded devices.

16) What are smart clients ?

Smart clients are easily deployed and managed client applications that provide an adaptive and interactive experience by leveraging local resources and intelligently connecting to distributed data sources.

17) What smart client applications include ?

Smart client applications provide some good experiences of thin clients and rich clients. Some of the important to mention are

- 1) Rich UI
- 2) Web Services & Online/Offline support
- 3) Broad Reach
- 4) Easy Change Management
- 5) Ease of Deployment
- 6) Device Adaptability etc.

18) Does VS.NET support direct execution of program in my smartphone i.e connected to System ?

Yes we can we use start debugging the application it responds with a dialog box where you must select device instead of device emulator. This way we can run application directly on the device.

19) Is DataGrid control works same way like desktop/web applications ?

Yes/No because it provides a similar view on compact device and no becoz it doesn't provide any editing capabilities, user must provide any alternate method like i/o using textbox and replacing with grid rows and cols.

20) Do we have setup and deployment project template for smart phone and pocket pc development ?

Yes we can prepare a setup for installing package in a smartphone and also the new ClickOnce deployment is provided even for these applications.

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