

What is Flex?

- Flex is a powerful, open source application framework which allows to build traditional applications for browser, mobile and desktop using the same programming model, tool, and codebase.
- Flex provides FLEX SDK consisting of the Flex class library *ActionScriptclasses*, the Flex compilers, the debugger, the MXML and ActionScript programming languages, and other utilities to build expressive and interactive rich internet applications *RIA*
- Flex takes care of the user interface *UI* or the client-side functionality of a web application. Server-side functionality dependent on server-side components written in a traditional scripting language *Java/PHP* etc.
- A Flex based application actually delivered as a SWF file and it closely resembles the HTML / Javascript portion of a traditional web application.
- Flex application is deployed as SWF files plus an HTML wrapper, the CSS files and any server-side script files *i. e. Java, . CFM, . PHP, etc* to the server. Like traditional web applications
- These resources are delivered from the server to the client browser using the customary HTTP request / response fashion and Flash Player run the application in the browser.

Advantages of Flex

- Flex applications being Flash Player based can access device capabilities like GPS, camera, local database, graphics accelerometer.
- Flex applications can run on Android, BlackBerry Tablet OS, iOS devices.
- Flex applications can run on Browsers as well as on Desktop.
- Flex applications are platform independent. UI can be native to platform or can be made same on each platform.
- Flex applications can interact with server with all major server side technologies like Java, Spring, Hibernate, PHP, Ruby, .NET, Adobe ColdFusion, and SAP using industry standards such as REST, SOAP, JSON, JMS, and AMF.
- Flex Applications developed assures Rich User Experience through intuitive interaction with the application and presenting information in a visually richer interface.
- Flex application is a single page application where states can transition from one state to other state without having to fetch a new page from the server or to refresh the browser.
- Flex application reduces the load on the server to great extent because it is only required return the application once, rather than a new page every time when the user changes views.

Disadvantages of Flex

- Flex applications are single threaded applications but Flex provides an asynchronous programming model to mitigate this concern.

- Flex is actionscript and XML based. Learning of these two is a must to work in Flex.