Flex in a Week, Flex 4.5

Video 1.01: Introducing Flex and the Adobe Flash Platform

In this video, you will learn which technologies make up the Adobe Flash Platform.

You will also learn about the professional tools in the platform and that they can generate rich media, content and applications.

Lastly, you will get an overview of the Flex framework and the features in Flash Builder that can greatly increase your productivity for building Flex applications.

This is the Adobe Flash Platform page on adobe.com.

From here you can learn about the technologies that enable you to create and deliver compelling applications for browsers, desktops and mobile devices.

With the Flash Platform you can build enterprise, SaaS, consumer, rich media, video, mobile, social applications and much more.

Be sure to come to this site to check out the real-world applications that are showcased here.

As an experienced web developer, you have probably heard of Adobe Flash and visited sites created with the Adobe Flash Professional tool.

However, this tool is only one technology in the platform.

You can use any of the professional tools to create rich media, content and applications that are played back in the Flash Player or AIR runtimes.

You can also add enterprise-level functionality with the server products, but this is outside the scope of this training.

As the name implies, Flex in a Week focuses on building applications with the Flex framework.

Specifically, you will be using Flash Builder to program, layout, style, skin, populate and compile Flex applications.

While you can build mobile applications with Flash Builder, in this training series, we will primarily focus on Flex applications that run in the Flash Player in a browser as you get your first look at how Flex works.

You will also learn how to build a Flex application that will run in the AIR runtime on a desktop.

AIR supports the deployment of web technologies, like AJAX, on the desktop and is the Adobe Flash Platform runtime for mobile devices.

Currently, Flex applications can be deployed to Google Android devices.

- This support will be expanded to BlackBerry Tablet OS and Apple iOS in June 2011.
- Because you can deploy Flex applications to both the Flash Player and AIR runtimes, you can count on consistent results across your web, desktop and mobile device solutions.
- This will save you time, money and make use of your existing skillsets.
- See additional resources for mobile Flex development on the Flex Developer Center.
- Next, I will discuss the professional tools.
- Flash Builder is geared towards developer productivity for Flex application development, but also has helpful designer-developer workflows.
- Flash Professional is an authoring environment to create content, animation, applications, and more using visual tools, a timeline or programming.
- Flash Catalyst is an interaction design tool for creating interfaces and content without writing code.
- What they all have in common is that they can compile SWF files among other file types which can then be rendered in the Flash Player or AIR runtimes.
- Flash Builder is used to build applications with the Flex 4.5 framework, which is a free, open source library of ActionScript 3.0 classes and UI components that can greatly improve your ability to create applications that deploy consistently on mobile devices, web browsers, and desktops.
- The framework includes standard and mobile-optimized components that can be used directly or extended for your customization and business needs.
- The framework also includes two languages:
- MXML is an XML-based declarative language that is recommended for UI layout.
- ActionScript 3.0 is an ECMA-compliant scripting language that is recommended for business logic.
- Both MXML and ActionScript are compiled languages, unlike JavaScript, which is an interpreted language.
- While a browser can interpret JavaScript code directly, MXML and ActionScript must first be compiled into a SWF file before they can be run in the Flash Player or AIR runtimes.
- The Flex SDK packages the Flex framework along with a compiler and a debugger in a free software development kit that you can use to build your Flex applications.

If you use the Flex SDK, you would write your MXML and ActionScript code in any code or text editor and then use the command-line compiler to compile the application.

Flash Builder 4.5, formerly known as Flex Builder, is the Adobe commercial product for building applications using the Flex framework.

This tool includes everything in the Flex SDK plus many features to improve your productivity.

You will learn about Flash Builder throughout the rest of this video series, but some of the features include context-sensitive code hinting and syntax templates, an interactive step-through debugger with variable evaluation, a mobile emulator and a debugger that works directly on a mobile device, a visual design environment for laying out and styling your application, data access wizards for connecting to server-side data, memory and performance profilers, automated testing support and more.

For your next step, watch the video titled "Incorporating Flex into the client/server world".