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Project 2

Windows server-based deployment provides robust server-based deployment options for hosting websites. It supports Internet Information Services (IIS) as the web server and offers various deployment tools like PowerShell and Web Deploy. Licensing costs for this will vary and depend on the number of instances of that server.

Linux server-based deployment distributions like Ubuntu Server and CentOS are widely used for web server hosting. They support popular web servers like Apache HTTP Server and NGINX, providing flexible and scalable deployment options. The cost of this will depend on the support and maintenance services requested since there is no direct cost associated with the operating system being open-sourced.

MacOS server-based deployment based on the macOS operating system, offers server-based deployment options for hosting websites. It includes features like Apache web server, PHP, and other tools for web application hosting. Costs associated with this will be the one-time purchase from the Mac App Store.

Cloud platform server-based deployment provide server-based deployment options with scalable infrastructure. They offer various services like virtual machines, containers, and serverless computing, making it easy to host web applications. Cloud platforms typically charge for the resources consumed, such as virtual machines or container instances, rather than licensing costs for the operating system itself. The pricing can vary based on the chosen instance types, storage, and network usage.

The cost of compatibility testing can vary based on the number of web browser platforms and mobile devices that need to be supported. It may involve manual testing efforts or the use of automated testing tools. The cost can increase with a larger target audience. Compatibility testing requires additional time in the development process. It involves testing the application's functionality, user interface, and responsiveness across different browsers and devices. The complexity and scope of testing can impact the overall development timeline. Testing for compatibility requires expertise in cross-browser and cross-device development. Developers need to be familiar with web standards, responsive design techniques, and testing methodologies to ensure the application works well across various platforms.

Programming Languages which are supported on the Microsoft platform include C#, ASP.NET, .NET Framework and are usually built in Microsoft Visual Studio, Visual Studio Code, IIS Manager. A development team working with Windows Server would typically require expertise in C# and ASP.NET development. Visual Studio and related tools provide a rich development environment, debugging capabilities, and integration with IIS. The impact on the development team would be the need for knowledge and experience with Microsoft technologies.

Programming languages supported on the Linux platform are PHP, Python, Ruby, Node.js, Java and are typically built in Sublime Text, Visual Studio Code, Eclipse, NetBeans. A development team working with Linux-based servers would need proficiency in one or more programming languages like PHP, Python, Ruby, or Node.js. The choice of tools and IDEs may vary based on the selected language. The impact on the development team would be the need for expertise in Linux server administration, command-line tools, and familiarity with open-source development practices.

Programming languages supported on the macOS platform are PHP, Python, Ruby, Node.js, Java and are typically built in Xcode, Visual Studio Code, Sublime Text. The development team working with macOS Server would require similar language proficiency as Linux-based development. Xcode is the primary IDE for macOS development, and tools like Visual Studio Code and Sublime Text can also be used. The impact on the development team would be the need for knowledge of macOS development practices, Xcode, and related frameworks.

Cloud platforms generally support multiple programming languages, including those mentioned earlier. Cloud-specific tools and SDKs provided by the respective cloud providers (e.g., AWS SDK, Google Cloud SDK, Azure SDK), along with popular IDEs like Visual Studio Code and Eclipse. Development teams working with cloud platforms need to understand the specific services and tools provided by the chosen platform. Familiarity with the respective cloud provider's SDKs, APIs, and deployment tools is essential. The impact on the development team would be the need for expertise in cloud architecture, infrastructure management, and integration with platform-specific services.