Hugh Hoang 1833106

There are two main categories of coding, scripting and programming for creating Web Applications: Client Side Scripting / Coding - Client Side Scripting is the type of code that is executed or interpreted by browsers and Server Side Scripting / Coding - Server Side Scripting is the type of code that is executed or interpreted by the web. Web Application Frameworks are sets of program libraries, components and tools organized in an architecture system allowing developers to build and maintain complex web application projects using a fast and efficient approach. Coding guidelines are sets of rules and standards used in programming a web application project. Web Application Lifecycle is the process of developing a web application and involvement of the multiple teams that are engaged in the development process. Some companies follow a certain standard model such as SDLC (System Development Life Cycle) or Agile Software Development Model. Testing is an important part of the Web Application Development process. On occasion, testing would consume more manpower and time than development itself. Today's web applications have substantial business impact on the way companies and consumers do business

Ruby on Rails is a web framework, not a programming language. Ruby is the language behind the Ruby on Rails framework, and PHP is the language used to write applications. As far as ease of maintenance, this depends on the organization of the application. PHP offers a massive selection of web frameworks, all designed for specific goals, while Ruby has a much more limited selection. In general, Ruby and PHP are some of the slowest languages to pick from. PHP, due to its heavy competition, has lower prices and a very easy learning curve. PHP has a very large pool of developers and online resources. Ruby on Rails also offers many resources online, but there are a far more resources available for PHP. Ruby on Rails is known for is scaffolding. Scaffolding is the process of generating code based on some known parameters and is a very powerful tool to help get your application to market.

Scalability and ease of maintenance have nothing to do with whether you select PHP or ASP.net platform. In terms of tasks there are three common scenarios: ability to access and query the database and output the result to the web server and then to the browser, the communication and interfacing between PHP and MySQL is faster than ASP.net and MSSQL but it is not very noticeable. The ability to access the file system, find an image and send it to the web server, the Linux OS and ext4 (file system) performs better (IO) than Windows OS and NTFS (file system.). Most Linux / Unix servers are run very lean without any extra un-needed packages or GUI interfaces and therefore the OS uses a lot less CPU and RAM which provides more allocation to the database and web server. So a LAMP platform will have an advantage over the ASP.net platform because it will have more available resources. PHP, MySQL server, PostgreSQL server, Apache server, and Linux OS are all free and upgrades are also free. In addition, there is no additional licensing cost for having another hot standby server as a backup, or needing to run multiple servers for load balancing or server clustering. Since LAMP is open source, there is a vast amount of dedicated and friendly developers around the world who continuously make improvements and updates, and provide support for the platform. Additionally, there are more support resources and developers available for PHP and LAMP Platforms. ASP.net relies on an available number of developers at Microsoft for making improvements and updates. There are less support contributors available to solve ASP.net challenges. It takes a larger amount (more lines) of code to accomplish complex features and functionality with ASP.net compared to PHP, adding more time to the development process. PHP & MySQL is editor independent. PHP developers have access to an extensive number of editors