Job Market Terms Analysis

APEX

Definition:

Apex is a coding language created by SalesForce Developers to integrate with their current platform that allows web applications to work with large data volumes. Much of Apex code is derived from Java and simplified to offer a more streamline solution to create scalable web applications that run within SalesForce servers. Apex is designed to allow coders to spend less time on the logistics and coding infrastructure and more time spent creating applications that serve the needs of customers and business logic.

Job Posting:

1. <https://www.dice.com/jobs/detail/Salesforce-%26%2347-Web-Developer-Cybersearch%2C-Ltd-Chicago-IL-60290/cybersea/9098?icid=sr4-1p&q=Web+Developer&l=Northbrook,%20IL>

Angular

Definition:

Angular was developed by Google and is an open source JavaScript framework that helps build web applications. The benefits of using Angular over other JavaScript frameworks include Dependency Injection, Two-Way Data Binding/Model View Controller, and ease of testing code.

Job Posting:

1. <https://www.dice.com/jobs/detail/Web-Developer-Request-Technology%2C-LLC-Chicago-IL-60605/napil006/CJ%26%2345FrontWed?icid=sr5-1p&q=Web+Developer&l=Northbrook,%20IL>

Ruby On Rails

Definition:

A framework for web developers similar to node.js although node.js is a runtime and not a framework. Ruby is a powerful backend language that allows developers to very quickly construct websites and web applications that usually take developers much longer to create in other languages. Examples of sites that were created using Ruby include Twiter, Hulu, Groupon, SoundCloud, AirBnb, CodeAcademy, Kickstarter, and IndieGoGo.

Job Posting:

1. <https://www.dice.com/jobs/detail/Full-Stack-Web-Developer-Robert-Half-Technology-Chicago-IL-60601/rhalfint/01300%26%23459501212732?icid=sr6-1p&q=Web+Developer&l=Northbrook,%20IL>

Spring

Definition:

A technology that's typically associated with developing backends for websites and databases often used in conjunction with Hibernate(object relational mapping). Spring is also used for JMS (Java Messaging Services). Spring is essentially an API with which you call on jar files. The idea is that you represent java objects using Spring “beans”. These beans are configured using XML or annotations. Spring allows you to wire together these “beans” in various ways.

Job Posting:

1. <https://www.dice.com/jobs/detail/Senior-Web-Developer-Request-Technology%2C-LLC-Chicago-IL-60605/napil006/CJ%26%2345SrWebDev?icid=sr7-1p&q=Web+Developer&l=Northbrook,%20IL>

IaaS and PaaS solutions

Definition:

IaaS, PaaS, and SaaS, allow for cloud computing. Cloud computing is a paradigm that allows on-demand network access to shared computing resources; a model for managing, storing, & processing data online via the internet.

Saas: Software as a service

It is a service that offers on-demand pay per use of application software to users. Unlike licensed bot programs, this service is platform independent and you don't need to install the software on your PC. The cloud runs a single instance of the software and makes it available for multiple end users. This makes cloud computing cheap; all the computing resources responsible for delivering Saas are entirely managed by the vendor. This service is either accessible via a web browser or lightweight client applications.

Who uses Sass? End customers are frequent users of Sass.

Examples of popular Saas services:

The google ecosystem such as Gmail, Google Docs, Google Drive, Microsoft Office 365, HR/Helpdesk Solutions, and customer relationship management such as SalesForce.

Paas: Platform as a service

This service is mainly a development environment and is made up of a programming language execution environment, an operating system, a web server, and a database. All of this encapsulates the environment where users can build, compile, and run their programs without worry of the underlying infrastructure. In this model, you manage data and the application resources; all other resources are managed by the vendor.

Who uses Paas? This is a domain for developers.

Example products and services of Paas include AWS Elastic Beanstalk, Google app Engine, Windows Azure Heroku, and force.com.

Iaas: Infrastructure as a service

This service offers the computing architecture and infrastructure; that is, it offers all computing resources but in a virtual environment so that multiple users can access them. These resources include data storage, virtualization, servers, and networking. Most vendors are responsible for management the above mentioned resources. If you will use this service you will responsible for handling other resources such as applications, data, runtime, and middleware.

Who uses Iaas? Iaas is mainly for system administrators.

Example products and services of Iaas include Amazon EC2, GoGrid, and rackspace.com.

what is IaaS and PaaS programming

Job Posting:

1. <https://www.dice.com/jobs/detail/Web-Developer-%26%2345-React%26%2347Redux-Matrix-Resources-Deerfield-IL-60015/matrixga/141853?icid=sr8-1p&q=Web+Developer&l=Northbrook,%20IL>

MVC

Definition:

The *Model View Controller* is an architectural paradigm for programming and not a framework. The structure of your web development and your programming is going to be built in a certain way in this MVC format.

So separate our model, our view, and our controller, and build the application in a way to process information in a certain way. It is more like a paradigm than framework, it's the processing of information in the a certain way. Ruby, CakePHP, Django(Python), Laravel, ZenFramework(PHP), CodeIgnitor, AngularJS, and iOS/Objective C, implement MVC structures. In order to use some frameworks MVC must be understood.

3 Structural Elements - Requires all 3 elements

M: Model - Database: MySQL/MongoDB/PostgSQL/NOSQL

V: View - Client: Chrome/Firefox, HTML, CSS, JavaScript

C: Controller - Server: Linux/Windows Server ---> Server-side languages: PHP/Ruby/Python

The model hands information to the controller. The controller never talks directly to the database. The controller talks to the model which talks to the database.

User---->Route Processing---->Controller---->Model---->Controller---->View---->User

Job Posting:

1. <https://www.dice.com/jobs/detail/web-developer-MatchSource-Evanston-IL-60201/90765502/423297?icid=sr9-1p&q=Web+Developer&l=Northbrook,%20IL>

SOAP

Definition:

With Simple Object Access Protocol you can transfer SOAP objects in terms of XML format over HTTP protocol. You can then use those objects and formulate those or whatever you need to do. Initially when SOAP started people wanted to transfer data from one website to another. SOAP has lots of building blocks. In general SOAP has a specific type of format. For example, you need a namespace, style attributes, body, etc. REST is the successor to SOAP. REST is Representational State Transfer. Both SOAP and REST transfer data over HTTP protocol. If SOAP is like an envelope and you package data inside of an envelope then REST is like a postcard. Rest is less secure than SOAP but you can make it more secure internally in the application using something like SPRING and secure your rest endpoints based on authentication and authorization of a different mechanism.

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| --- | --- |
| **SOAP** | **REST** |
| A XML-based message protocol | An architectural style protocol |
| Uses WSDL for communication between consumer and provider | Uses XML or JSON to send and receive data |
| Invokes services by calling RPC method | Simply call services via URL path |
| Does not return human readable result | Result is readable which is just plain XML or JSON |
| Transfer is over HTTP. Also uses other protocols such as SMTP, FTP, etc. | Transfer is over HTTP only |
| JavaScript can call SOAP, but it is difficult to implement | Easy to call from JavaScript |
| Performance is not great compared to REST | Performance is much better compared to SOAP - less CPU intensive, leaner code etc |

Job Posting:

1. <https://www.dice.com/jobs/detail/Senior-Web-Developer-%26%2345-REMOTE-AMS-Staffing-Inc.-Chicago-IL-60606/10192616/409641?icid=sr10-1p&q=Web+Developer&l=Northbrook,%20IL>

Microfocus COBOL

Definition:

Cobol is what is widely considered to be an outdated language often related to banking systems. Most COBOL programmers work in maintaining existing COBOL systems. A lot of IBM mainframes run COBOL code. There are a lot of older 20-30 year veterans experienced in COBOL. Although these programmers are in demand investing in learning COBOL may not be worth your time because although in demand job opportunities are still more scarce than other programming languages. Huge numbers of COBOL programmers are reaching retirement age so they are leaving the workforce.

Microfocus COBOL runs within modern IDEs such and Eclipse or Visual Studio. Today’s COBOL can be deployed to .NET, Java Virtual Machine, and the cloud. It integrates with other languages like Java and C#. Without COBOL most banking, cell communications systems, traffic light systems, air traffic controlling systems, and train transportation services would stop working.

Job Posting:

1. <https://www.dice.com/jobs/detail/Javascript-Developer-Robert-Half-Technology-Deerfield-IL-60015/rhalfint/01340%26%23459501192642?icid=sr1-1p&q=JavaScript+Developer&l=Northbrook,%20IL>

AJAX

Definition:

AJAX stands for asynchronous JavaScript and XML. AJAX is a web development technique used to send and receive data in the background without refreshing a webpage. Instead of loading the data via HTTP request, AJAX uses JavaScript XMLhttpRequest Object in order to make HTTP request behind the scenes. The user can receive new data without reloading the page.

Job Posting:

1. <https://www.dice.com/jobs/detail/Full-Stack-Developer-with-JavaScript-and-Angular-NetStrive-Consulting-Chicago-IL-60601/10508995/NC%26%23450313?icid=sr13-1p&q=JavaScript+Developer&l=Northbrook,%20IL>

Webpack

Definition:

Webpack converts dynamic code and modules into static assets. You can take a fully dynamic applications and convert them to static assets to be loaded from the server. Webpack uses Code Splitting” which allows developers to break up a code base into chunks which can be loaded on-demand. Code splitting is an opt-in feature where the developer provides “split points” into their code. By default Webpack can only work with native JavaScript however “Loaders” can be used to transform other resources into JavaScript such as CSS, JSX, or Saas.

Webpack also has a very clever way to parse just about any 3rd party library so you can use expressions and dependencies. Webpack can also use both AMD and common js modules.

Some popular webpack loaders are CSS & Style, Saas & Less, JSX(React), Babel, Coffee, TypeScript, EJS, Pug, Handlebars, and json.

Webpack reads the entry point and analyzes its dependencies, its dependencies’ dependencies, and so on. Webpack then bundles the entry point and all its dependencies into a sing file.

Job Posting:

1. <https://www.dice.com/jobs/detail/Node-js-%26%2347java-ui-%26%2347fullstack-Photon-Infotech-Deerfield-IL-60015/10462843/341992?icid=sr2-1p&q=Node+Developer&l=Northbrook,%20IL>