

## SKILLS REQUIRED FOR WEB DEVELOPER

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### Abstract

There is huge unemployment in India. People are getting degrees but not jobs. This paper emphasises the area of web development which has huge job requirements due to increasing web drive in the present time. Web presence today has become a vital element for an organization striving to fulfil its objectives in an efficient manner. And equally important, if not more, in the mantra of success is the role of the web service provider. Setting up a powerful web presence is a voyage of discovery. This research work focuses on the web technologies used for coding the websites at the front-end as well as the back-end. While implementing a web application, designing part has various options, this work has endeavoured to find the mostly used language platform for web application development.

### 1. Introduction

In today's vast range of technology, language and platform choices, it can be very difficult to figure out where to best invest time in training your skills as a web developer. To secure a tech-hefty graduate job such as web developer, web designer or graphics designer, you'll need to ensure you have the web designing languages and other technical/Interface skills, the employers want. You may have a degree in computer science, but you may still not be able to fit the expectations of your prospective employer. Degree alone is not sufficient to skill a person but one should invest time to develop skills that are required as per the latest technologies.

Web development can range from developing the simplest static single page of plain text to the most complex web-based internet applications, electronic businesses, and social network services. The different areas of web design include web graphic design, interface design, authoring, including standardised code and proprietary software; user experience design; and search engine optimization and so on. A Web Designer earns an average salary of Rs 231,555 per year in India as per a survey done on 1572 individuals in January 2017 [3]. A skill in Web Development is associated with high pay for this job. People in this job generally don't have more than 10 years' experience. Experience strongly influences income for this job. Web design is as much a science as it is an art form. While half of the job is based on sound coding and design know-how, the other half is based on just having an intuitive sense of what looks good and what doesn't.

### 2. Web Development Process and Experiment Results

This research paper is focused as to which web application platforms are used for designing of websites, website hosting server and other development services. Data was collected from various web development companies working in Delhi and NCR. The people contacted were the Director or HR person who were kind enough to share their data for this research work. The main focus was to find which technologies are sought most while recruiting new web designers/programmers. The results found from that data are represented here.

Web development is all about communication and exchange of data between client and server over HTTP protocol. Client-side programming is writing code that will run on the client, it deals with the user interface with which the user interacts in the web. The coding is mainly done in any scripting language to design interactive web pages, interact with temporary storage, works as an interface between user and server, sends requests to the server and retrieval of data from server. On the other side, the sever side programming is the kind of program that runs directly on the server and deals with dynamic content as most web pages deal with searching databases. The programming on this end deals with processing the user input, displaying the requested pages, structuring web applications, interaction with servers/storages, interaction with databases, querying the database, encoding of data into HTML and operations over databases like delete, update.

There are various web coding languages available for web programming for client as well as server. The data was collected for both client and server-side application development technologies. The responses received are shown in the figure1 and figure 2. The main platforms used for client-side web development are HTML, Java Script and PHP. CSS is another choice for client-side programming. In very few cases Java, ASP.NET and Web 2.0 are used for website development at client-side. On the other hand, PHP is the main choice for sever-side web application development. Java and ASP.NET are the next choices for the server-side and Java Script follows these. HTML, CSS and Web 2.0 are used in very rare case for this end.

### 1. Which technology is used to develop Client side Web application?

8 responses

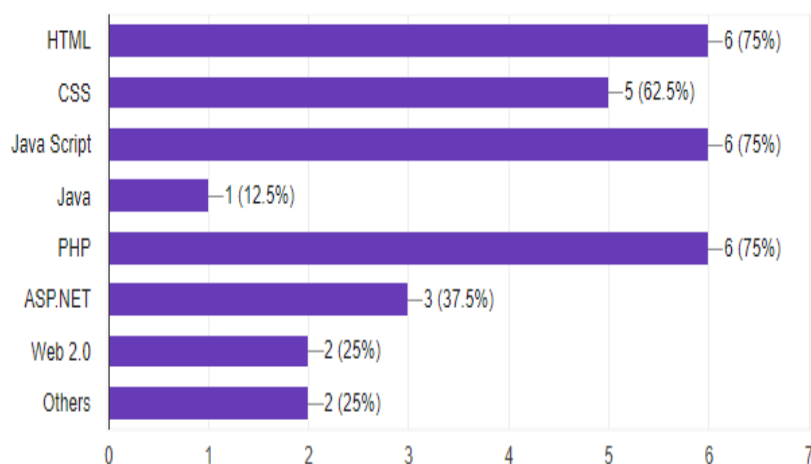


Figure 1: Languages used to develop Client-side Web applications.



Figure 2: Languages used to develop Server-side Web applications.

The back-end database is another platform used along with dynamic websites which deals with security, structure and content management. MySQL is the first choice for database management in back end [Figure 3]. Oracle and other database management language are not among the mostly used platforms.

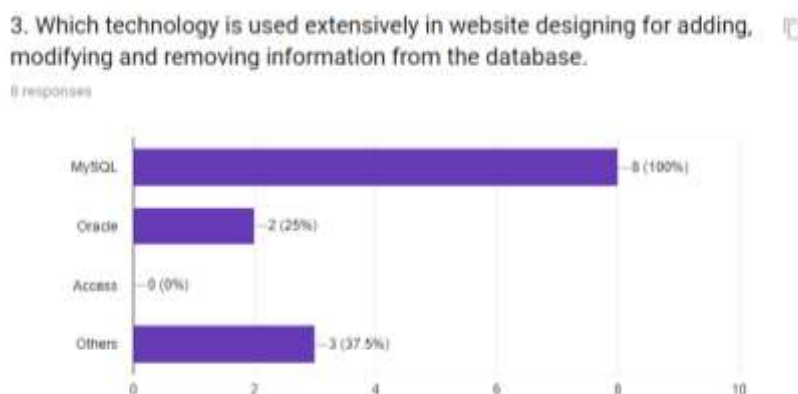


Figure 3: Technology used for Database Management in Websites.

Having choices is always a good thing. But sometimes it's supportive to have a chaperon, so the next part is to help cut the noise i.e. which guides the beginners to learn the skills they need to get their first job in web development. The person interested in making their career in website development should invest in mastering which skill which is sought most to improve their employability. The survey results yield the output that PHP is at the peak among all other technologies for hiring web programmers. HTML, Java Script, Java come after that. CSS, Web 2.0 and others stand at the last in securing the web designer job (Figure 4).

4. Which skills are sought for hiring web designer/programmer?

8 responses

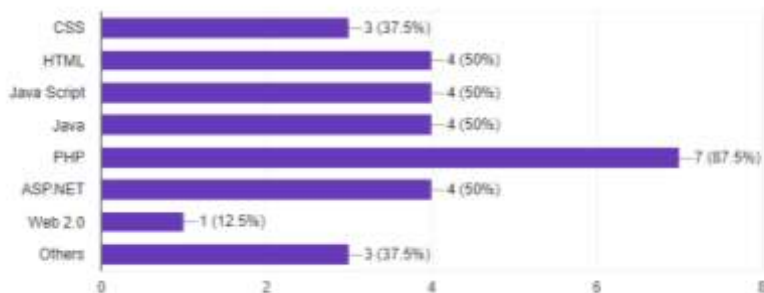


Figure 4: Major Technologies sought while hiring Web Designers.

Major criteria for hiring the web designers is Interview including both technical and HR interview, which is conducted in 75% of the cases whereas written test is another choice to sieve the candidates (Figure 5). Generally, persons with less than 5 years of experience are must sought in this profession. Sometimes freshers (25% of cases) are also considered for new recruitments. Since, in this profession there are very few people with more than 10 years of experience, so the demand is for less experienced persons which can be trained as per the demands of the company.

5. What is the criteria for selection of web designer.

8 responses

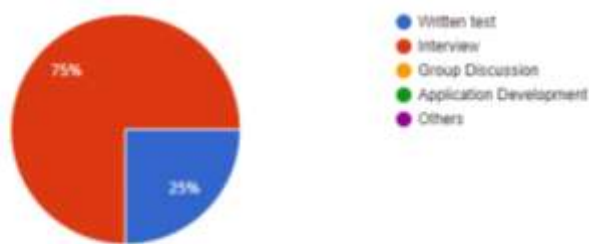


Figure 5: The Criteria for hiring Web Designers.

6. Which type of person is preferred?

8 responses

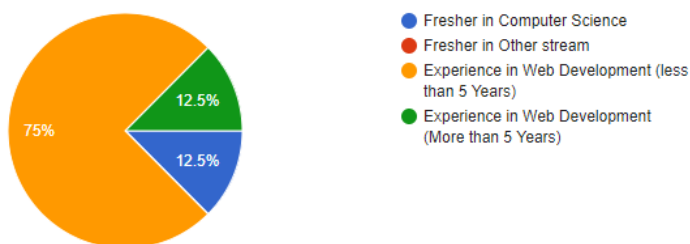


Figure 6: The Experience in Recruitment of Web Designer/ Programmer.

### 3. Discussion

*Web designers* use a combination of *design* and *IT skills* to create, develop and maintain *websites*. They must find a balance between the visual appeal of a *website* and its functionality as per the specific *requirements* of the clients to *design* the underlying architecture. This research work was initiated to know as to which technologies are mostly used for website development and related solutions. A total of 8 companies in Delhi and NCR were contacted including NIC Lodhi Road, which is extending comprehensive WWW services to the Central and State Governments, ministries and departments in the areas of consultancy, web design and development, web hosting, value added web services for promotion of websites, enhancement of websites & training. The other companies which were contacted were the companies working and recruiting in Delhi and NCR region to provide web services. The results found in this research work are highlighting the major technologies/skills considered for recruiting web designers. There are definitely other skills such as empathy in communication, time and stress management, perspective and design sense which are also required in web designers. The purpose of this work was to find out the core languages/technologies used for hiring web professionals.

### References

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