

Career Profile

A weekly series devoted to providing information on career exploration

The Type of Work

- Design, build, or maintain web sites, using authoring or scripting languages, content creation tools, management tools, and digital media.
- Perform or direct web site updates.
- Write, design, or edit web page content, or direct others producing content.
- Confer with management or development teams to prioritize needs, resolve conflicts, develop content criteria, or choose solutions.
- Evaluate code to ensure that it is valid, is properly structured, meets industry standards and is compatible with browsers, devices, or operating systems.
- Maintain understanding of current web technologies or programming practices through continuing education, reading, or participation in professional conferences, workshops, or groups.
- Analyze user needs to determine technical requirements.

Pathways to Success

The rapid and widespread use of computers and information technology has generated a need for highly trained workers proficient in various job functions. Job tasks and occupational titles used to describe these workers evolve rapidly and continually, reflecting new areas of specialization or changes in technology, as well as the preferences and practices of employers.

Most community colleges and many independent technical institutes and proprietary schools offer an associate's degree in computer science or a related information technology field. Many of these programs may be geared more toward meeting the needs of local businesses and are more occupation specific than are 4-year degree programs. Employers usually look for people who have broad knowledge and experience related to computer systems and technologies, strong problem-solving and analytical skills, and good interpersonal skills. Courses in computer science or systems design offer good preparation for a job in these computer occupations. For jobs in a business environment, employers usually want individuals to have business management or closely related skills, while a background in the physical sciences, applied mathematics, or engineering is preferred for work in scientifically oriented organizations. Art or graphic design skills may be desirable for webmasters or Web developers.

What Employers Look For

Individuals who possess knowledge in:

- Computers and Electronics - circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
- English Language - the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
- Customer and Personal Service - principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
- Design - design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.
- Communications and Media - media production, communication, and dissemination techniques and methods. This includes alternative ways to inform and entertain via written, oral, and visual media.
- Mathematics - arithmetic, algebra, geometry, calculus, statistics, and their applications.

Job Outlook

Computer specialists held about 135,900 jobs nationally in May 2006. Employment is expected to increase by 15% through 2016. Although they are increasingly employed in every sector of the economy, the greatest concentration of these workers is in the computer systems design and related services industry. Firms in this industry provide services related to the commercial use of computers on a contract basis, including custom computer programming services; computer systems integration design services; computer facilities management services, including computer systems or data processing facilities support services for clients; and other computer-related services, such as disaster recovery services and software installation. Many computer scientists and database administrators are employed by Internet service providers; Web search portals; and data processing, hosting, and related services firms. Others work for government, manufacturers of computer and electronic products, insurance companies, financial institutions, and universities.

Local Education Websites

Lorain County JVS
High School Program
www.lcjvs.com

Lorain County
Community College
www.lorainccc.edu

Ohio Business College
www.ohiobusinesscollege.edu

Tiffin University
www.tiffin.edu

Earnings Potential

Location	Year	Pay Period	Low	Median	High
United States	2008	Yearly	\$40,700	\$75,200	\$114,800
Ohio	2008	Yearly	\$39,100	\$72,000	\$102,400
Cleveland Elyria-Mentor, OH MSA	2008	Yearly	\$40,000	\$70,300	\$101,900

O*Net Online, <http://online.onetcenter.org>.

WEB DEVELOPER



DEFINITION: Develop and design web applications and web sites. Create and specify architectural and technical parameters. Direct web site content creation, enhancement and maintenance.

NAME: Kate Sohl, Owner/Web Developer

COMPANY: Vibe Development/Freelance in Elyria, OH

Q. How did you become interested in your particular field?

A. I've always loved technology and computers. But, when it came time to decide what I was going to take at college, I admit I was a little unsure. I was looking into the different courses at LCCC, and I decided to give Web Development a chance.

Q. Who or what influenced your decision the most and why?

A. I'm a very indecisive person, so I was going back and forth about what to take. I ended up having a talk with my dad, and as always, he gave me some good advice. He suggested Web Development, knowing my love of computers and technology. Turns out it was a good fit.

Q. What is your educational background?

A. After graduating from high school, I waited a year before going to college. After deciding on Web Development, I went to LCCC for two years and got an Associate of Applied Business degree majoring in Web Development.

Q. What was the most critical class or training you took and why?

A. Here I go again with the indecisiveness, but I can't say that I could have done without any of the classes involved with my major. There's bits to each of them that I still use. There were certain aspects of different classes that helped me learn the importance of documentation, maintainability, and creating clean code. In addition, I will say that on the job training was also invaluable for me. When I graduated, I felt like I knew absolutely nothing... and, I really didn't in the big scheme of things. But, one of my professors told me that as long as I recognize I know only "this much", (making a small sign with his hand), but that there's "this much" to know, (as he stretched out his arms), I'd be just fine. And I think that really proved true.

Q. How did you get to where you are today?

A. After graduating from LCCC, I got an internship with an IT firm in downtown Cleveland called InteroTech. That turned into a regular position, and I worked there for 15 months. They were really good to me, but I decided to leave to start working for myself. I thought that would give me the opportunity to wear different hats, as it were, ... to have a part in different aspects of the project. And it has. I've been doing that for just over a year now, and I've really enjoyed it.

Q. What skills do you think are needed to be successful in this field?

A. I think a willingness and a desire to learn are essential. The Web is constantly evolving; new techniques and practices are coming about; it's important that you learn these and keep your skills sharpened. I also think the ability to communicate clearly is important. It doesn't matter if you picture your ideal position to be sitting behind a computer never having to deal face-to-face with clients; sometime, somewhere, you will have to. At the very least, you'll have to be able to clearly communicate ideas and issues to other team members. It's rather crucial to a project's success.

Q. What is the best part of your job?

A. I love the feeling of looking at a project once I've finished. To look at it, to know the time and work I put into it, and to have a finished product I can be proud of. I also love that, the Web is always changing. Things are never exactly the same, even within a single project and I like that.

Q. Did you have any words of advice for someone considering a career in your field?

A. Be ready to take your job seriously. Web development can be very competitive, especially as a freelancer or a business owner. And, as with most jobs, there will always be someone else who says they can do the same job better, faster, cheaper. A lot of the skills I now have I acquired after getting into the workforce. But, that doesn't mean that what I learned in school wasn't valuable, as it was. If you're fortunate enough to go to school for Web development, or any other major, and regardless of the amount of time you invest or where you go: take it seriously.



Sources: Occupational Information Network, O*Net Online, <http://online.onetcenter.org>.** U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, <http://stats.bls.gov/oco>