

Web & Software Development Career Guide

A guide for software developers, web developers.



Finding Your Way to a Career: Web & Software Development

All businesses, from small entrepreneurs to multi-national corporations, rely on software. Every modern business function uses software; accounting, marketing, logistics, inventory, operations, human resources, management, sales, and more. A developer is an individual that builds and create software and applications. They write, debug, and execute the source code of a software application.

How to use this document to learn more.

As one of the Top 100 Hot Jobs for 2022, IT developer is a promising occupation for job seekers in West Michigan. To find out if this might be a good career choice for you, use this Career Map to examine:

- Who might enjoy this kind of work.
- Qualifications needed in this career field.
- Growth potential and levels of pay.
- Valuable skills for this type of work.
- Common tools and technology used in this work.
- Occupations, responsibilities, and other job titles.

This information is drawn from national data and insights from West Michigan employers. It is meant as a starting point for job seekers and career coaches to work together in the exploration of meaningful and fulfilling careers.



Exploring Occupations in Web & Software Development

Developers create the software used in virtually all walks of modern life. They write code and work with teams of coders to create programs for computers, mobile devices, and websites. They might update end-user software and conduct quality control functions. They may also design and develop algorithms and flowcharts to create new software programs and systems.

The Path to Success

Who might enjoy this type of work?

People who work in the IT developer field tend to enjoy:

- Following set procedures and routines.
- Working with data and details more than with ideas.
- Having a clear line of authority to follow.
- Mental problem solving.
- Working with ideas and using cognitive (thinking) skills.
- Practical, hands-on problem solving.
- Working with real world materials like wood, tools, and machinery.

People who do well in this work generally perform well in such areas as:

- Responsibility
- Ingenuity
- Adaptability
- Achievement
- Information Skills

Qualifications needed in this career field.

Nationally, most people working in a web and software development role have a Bachelor's degree. Sample certifications also include:

Software Developers credential sample: Scrum Master, Microsoft Certified Solutions Developer.

Web Developers credential sample: Master Certified Web Professional - Designer (CWP).

Growth potential.

In the West Michigan counties of Allegan, Barry, Ionia, Kent, Montcalm, Muskegon and Ottawa, there were 3,685 IT developer jobs in 2020. That number is projected to grow by at least 13% to 4,078 by 2025.

Valuable skills for this type of work.

Tasks and functions performed by web and software developers include:

- Interacting with computers.
- Thinking creatively.
- Getting information.
- Making decisions and solving problems.
- Updating and using relevant knowledge.

Common tools and technology used in this work.

Tools: Code editors, debuggers, compilers, linkers

Technology: Cloud platforms, frameworks, software languages

Mapping a Career: IT Design Web & Software Development



Wage ranges represent 25th - 75th percentile.
Timeframes represent the typical education and experience combined.
See page 6 for detailed description of occupations.

LESS THAN 2 YEARS

2-4 YEARS

5-9 YEARS

10+ YEARS

Web & Software Development: A Field Guide

Occupations, responsibilities and other job titles.

Software Developers

Research, design, and develop computer and network software or specialized utility programs. Analyze user needs and develop software solutions, applying principles and techniques of computer science, engineering, and mathematical analysis. Update software or enhance existing software capabilities. May work with computer hardware engineers to integrate hardware and software systems, and develop specifications and performance requirements. May maintain databases within an application area, working individually or coordinating database development as part of a team.

Examples of locally used job titles: application developer, application integration engineer, developer, infrastructure engineer, network engineer, software architect, software developer, software development engineer, software engineer, systems engineer .

Web Developers

Develop and implement websites, web applications, application databases, and interactive web interfaces. Evaluate code to ensure that it is properly structured, meets industry standards, and is compatible with browsers and devices. Optimize website performance, scalability, and server-side code and processes. May develop website infrastructure and integrate websites with other computer applications.

Examples of locally used job titles: technology applications engineer, web architect, web design specialist, web designer, web developer, webmaster.



West Michigan Works! is part of the statewide Michigan Works! system and the workforce development agency in West Michigan. We serve the employers and job seekers of Allegan, Barry, Ionia, Kent, Montcalm, Muskegon and Ottawa counties.

We partner with employers, educators, economic developers and community organizations to create a qualified workforce that meets our region's current and future talent needs and fuels our shared economic future.

Learn more at: <https://www.westmiworks.org/>



CareerPoint helps students and job seekers find their place in the world of work by matching interests and abilities with training, support, and meaningful and rewarding careers.

By providing training and tools, CareerPoint supports the workforce professionals who help people navigate the West Michigan job market.

CareerPoint promotes evidence-based coaching to help students and job seekers discover and follow pathways to rewarding careers. This model follows seven steps to each participant's success.

Learn more at: <https://talnetcareerpoint.org/>