SHOWING YOUR **SKILLS**

HOW TO BECOME A STAR DEVELOPER

OVER THE PAST DECADE,
digital technologies have ushered in enormous changes.

Nowhere is this more apparent than in the arena of software development. Many legacy programming languages have faded into the background, while other coding languages have come and gone.

2008
2009
2010
2011
2012
2013
2014
2015
2016

The upshot? Today, developers must be extremely agile and flexible. To succeed in this new era, it's critical to learn new skills and adapt to radically changing conditions — including a rapid uptick in demand for coding on mobile platforms and for the Internet of Things. In addition, it's now crucial to think about cybersecurity during the entire lifecycle of both code and applications.

Demand for developers seems insatiable — one recent study found that 83 percent of employers reported a shortage of software development professionals[1] — so the need to stay current with skillsets is more important than ever. In fact, if anything, software development cycles have accelerated while new programming languages have moved into the mainstream.

Today, it's important to be on top of your game and position yourself for maximum success. This thinking ultimately translates into better jobs at more desirable companies — along with a higher income. However, running at the front of the pack requires a focus on more than simply producing functional code. Several key areas, including project management, methodologies, project execution, cybersecurity and estimation techniques, are critical to success.

It certainly isn't the same software development environment it was even five or 10 years ago. Adding to the challenge: Digital technologies will almost certainly spur even greater changes in the months and years ahead.

Job growth for software developers in the United States is projected to grow by 17 percent annually through 2024.[2]

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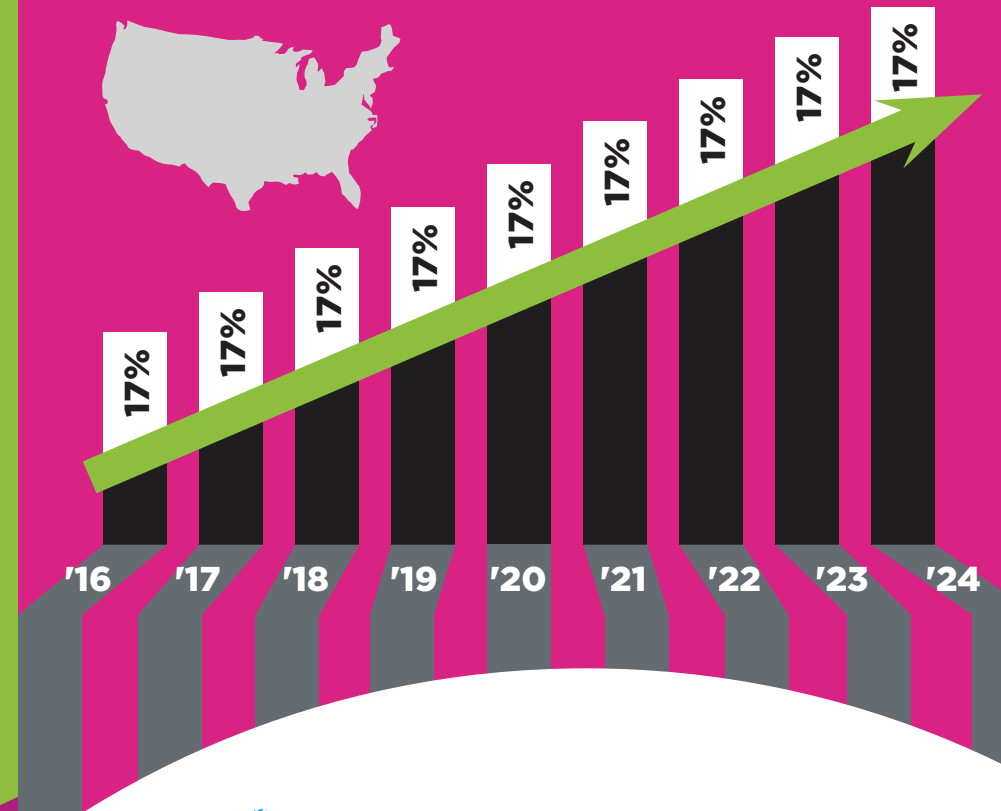
TWEET

In addition, 83% of respondents to one study reported a **shortage of software development professionals,** due mostly to the lack of qualified local talent.[3]

VIEW TO A SKILL

Here's how you can develop and showcase your skills — and better position yourself for long-term career success:

Learn how to be agile and flexible. There's an enormous need to be adaptive in today's fast-moving software environment. In the past, a bulk of software programming took place in languages like Algol, Cobol and Fortran. But those jobs are now in shorter supply and the numbers will continue to dwindle. Today, developers increasingly rely on a different set of languages, including Java, Python, Clojure, Angular, JavaScript, iOS, Android and Ruby, as well as a number of other open-source platforms. Even more concerning: Within a few years, these languages could give way to new and different programming languages. The bottom line? The need to learn any particularly development language takes a backseat to the need to learn how to learn languages and stay current.

LANGUAGE SETS

- Java
- Python
- Clojure
- Angular
- JavaScript
- iOS
- Android
- Ruby
- Other open-source platforms

VIEW TO A SKILL

Recognize how learning and skill acquisition have changed.
Not surprisingly, developers who can write code in new and highly coveted languages are in the greatest demand. They also typically receive the highest pay. However, gaining knowledge and skills is very different today than it was even a decade ago. Then, you would almost certainly pick up a technical reference book and study it. Now, you typically have to attend conferences, workshops, and participate on websites and in online communities. This is particularly the case for open-source coding platforms. The good news:
The barriers to entry to learn new coding platforms are lower than ever, and the demand for developers is so great that it's almost impossible to make a bad decision about any current language. The key is to sustain learning and skill development over the long term.

Conferences

Workshops

Participation

Website and online communities

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VIEW TO A SKILL

▶ **Understand that cybersecurity is no longer an afterthought.** A steady drumbeat of breaches and breakdowns — as well as an increasingly hyper-connected world — is leading to a fundamental change in mindset about software development. **Overall, more than 50,000 job listings for certified cybersecurity professionals were posted in 2014, and the number is on the rise.**[4] It's now important to build solid security into code from the outset. In fact, developers who have a base level of knowledge about secure coding practices have a competitive advantage. No less important: Many organizations are beginning to write these requirements into job descriptions and are consequently looking for developers who possess cybersecurity skills. In addition to taking a more systemic approach to learning, it's important to use tools that can aid in secure coding, such as static and dynamic scanning.

5 KEYS TO BECOME A WORLD-CLASS CODER

There are five foundational elements to best-practice coding:

1 **Maintainability**

2 **Dependability**

3 **Efficiency**

4 **Usability**

5 **Security**

TWEET Veracode has found that as many as 81% of software programs can be patched or updated to eliminate threats.

CODING FOR SUCCESS

There are no guarantees in any profession.
However, it's clear that developers today must:

Adopt an
agile and flexible
mental framework

Constantly upgrade
their toolkit with new
skills and knowledge

Track
industry and
business trends

**Those who succeed
will be in the driver's seat.**

They'll be able to build long,
successful and rewarding careers,
and help their organizations
take software development
to a new and better level.

ENDNOTES

1 "Research Shows Employers Struggle with Shortage in Software Development Talent," Business Wire, February 11, 2015.

2 *Occupational Outlook Handbook*, U.S. Department of Labor, Bureau of Labor Statistics, 2015.

3 "Research Shows Employers Struggle with Shortage in Software Development Talent," University of Phoenix, February 11, 2015.

4 "Job Market Intelligence: Cybersecurity Jobs," 2015, Burning Glass Technologies, 2015.

Can **DevOps** be one of the most disruptive trends ever to hit software development, or even application security?

Read our white paper, "**Putting Security Into DevOps**," to learn how DevOps enables developers to integrate security testing, validation and monitoring into both application development and deployment.

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