

# **BENCHMARK IT HIRING GUIDE: Full Stack Developer**



# Benchmark IT Hiring Guide: Full Stack Developer

## SUMMARY

Identifying and recruiting a Full Stack Developer with the required skills, experience, and personality for your project requires a strategic plan and concentrated effort between human resources and technology leadership. The Benchmark IT Full Stack Developer Hiring Guide provides a flexible framework your business can use to find, recruit, and ultimately hire the right person for the job.

## I. INTRODUCTION

Full Stack Developers build all components of the web tech stack—from the front-end to the back-end. Among software engineers, they're considered to be “Jacks and Jills of all trades.” They are involved with all phases of web application development, from building server logic, implementing it across various technologies and frameworks to creating code that runs within the browser.

The Bureau of Labor Statistics predicts an [8% growth](#) in web developer jobs in the coming years and a [22% increase](#) for Full Stack Developers by 2029.

Website development is by far the most common task for a Full Stack Developer. However, there are also several variations, including blockchain and cryptocurrency integration, database creation, and development operation processes.

Along with all the technicalities of web programming, Full Stack Developers are responsible for the user interface, the user experience, and functionality. Successful Full Stack Developers need a fundamental understanding of design and must possess the skills to provide a flawless user experience.

Typically, Full Stack Developers are highly proficient in many programming languages and look at the bigger picture of software development. However, full stack engineers often specialize in working with a particular stack. The most popular are MEAN and LAMP stacks.

### MEAN stack developer

- Is a set of technologies based on JavaScript.
- The name **MEAN** stack is based on these software language components: **M**ongoDB, **E**xpressJS, **A**ngularJS, and **N**ode.js
- The entire MEAN stack is written in JavaScript at the client, server, and database levels.

### LAMP stack developer

- **LAMP** is also an abbreviation. It includes four popular technologies: the operating system, **L**inux; the webserver, **A**pache; and the programming languages, **M**ySQL – DBMS and **P**HP.

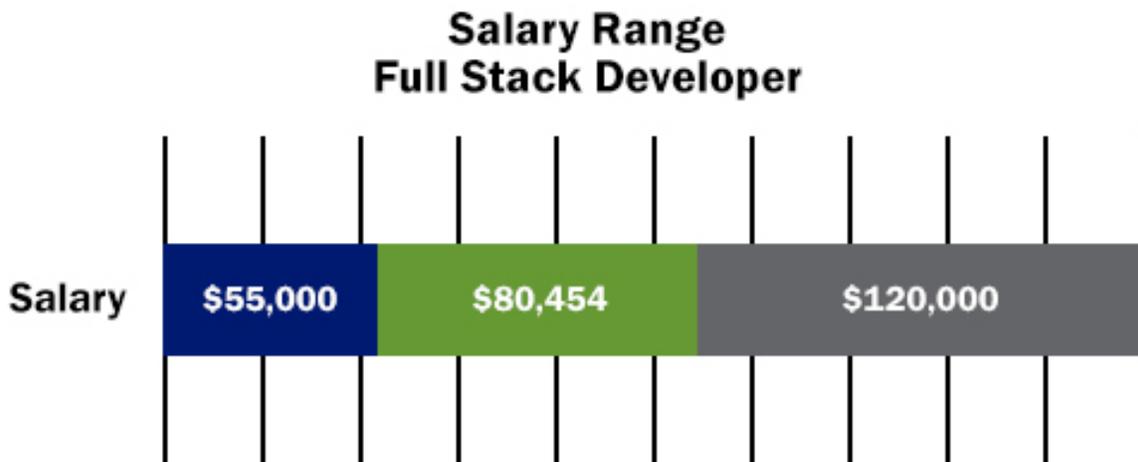
MEAN and LAMP stacks are the two most frequently used stacks. However, Full Stack Developers can use other combinations of technologies, depending on the needs of your business and the type of application required.

A key point to consider when recruiting and hiring a Full Stack Developer is that they possess both front-and back-end development abilities. Ultimately you need someone who will create a positive user experience that translates into profitability on the front-end.

## II. SALARY RANGE

A Full Stack Developer's salary depends on many variables including, location, the nature of the position, the number of projects, the size of the team, and the amount of requisite experience desired. According to Glassdoor, the salary range for a Full Stack Developer in the United States ranges from about \$55,000/year to almost \$120,000/year. The median salary in that range is \$80,454/year. The median salary in that range is \$74,000/year.

(Figure A).



SOURCE: TechRepublic

However, there are also variations in salary ranges based on both the programming languages used and the industry you're in, as detailed below:

## Full Stack Developer Salaries by Programming Language



### Full Stack Developer Salaries by Industry:

- Accounting/Legal: \$100,873
- Entertainment: \$82,159
- Banking/Finance: \$119,846
- Computer Software: \$97,288
- Information Technology: \$95,928
- Insurance: \$102,535
- Tech: \$111,641
- Telecommunications: \$85,478
- Transport/Logistics: \$86,723
- Travel & Tourism: \$92,486

SOURCE: [careerfoundry.com](https://www.careerfoundry.com)

### III. DETERMINING FACTORS, DESIRABLE PERSONALITY TRAITS, AND SKILLSETS

Before beginning the recruitment process, you'll need a comprehensive job description with detailed job responsibilities and expected project outcomes. Expertise in specific development languages, API calls, and back-end database creation varies depending on the project. Internal or external recruiters must have a clear understanding of those factors.

Typically, Full Stack Developers work with a cross-functional development team, project managers, product managers, executives, and other stakeholders of varying technical knowledge and ability. Candidates should demonstrate their ability to cooperate, collaborate and work with a wide variety of team members and personalities in a dynamic working environment.

### IV. FULL STACK DEVELOPER JOB DESCRIPTION

*[Select or add the specific requirements of your position]*

*[Your company name]* seeks a highly skilled and motivated Full Stack Developer to create scalable software solutions. You'll be part of a cross-functional team responsible for the entire software development life cycle, from conception to deployment. You are comfortable around both front-end and back-end coding languages *[including: PHP, HTML, CSS, C++, Python, .NET, JavaScript, MySQL, SQL, MongoDB, etc.]* in a dynamic and collaborative working environment to achieve specified organizational goals. You are a team player with an eye for visual design and utility. Familiarity with Agile methodologies is a plus.

## Responsibilities

*[Modify the list to match your requirements]*

The Full Stack Developer will:

- Design, create and implement software solutions while working with the product and development team.
- Design, develop and implement web architecture and applications.
- Design and launch new features and applications, collaborating with the engineering team.
- Create and implement the user experience.
- Develop the front-end website architecture using these programming languages: *[List all that apply]*.
- Develop the back-end website architecture using these programming languages: *[List all that apply]*.
- Develop mobile applications using these programming languages: *[List all that apply]*.
- Design, develop, and deploy well-functioning databases in support of websites and applications.
- Develop and implement continuous integration and continuous deployment process.
- Design, develop and implement a back-end API.
- Design, develop and implement data in-take services for data transformation into a structured database.
- Manage cloud-based hosting services (Azure and AWS).
- Contribute expertise and problem-solving skills in all phases of the development lifecycle.
- Be an information source and mentor to junior team members.

## Desired Competencies and Experience

*[Modify the list to match your requirements]*

Successful candidates will have:

- [X+] years of related industry experience as a Full Stack Developer or similar role.
- Demonstrable proficiency in using these programming languages: *[List all that apply - PHP, HTML, CSS, C++, Python, Ruby, Java, JavaScript, etc.]*
- Demonstrable proficiency in using these database systems: *[List all that apply - MySQL, SQL, MongoDB, etc.]*
- Demonstrable proficiency in using these integrated development environments and/ or version control systems: *[List all that apply - Visual Studio, NetBeans, Eclipse, Git, etc.]*
- Experience with database design and management, including being up on the latest practices and associated versions.
- Experience managing cloud-based hosting services like Azure and AWS.
- Experience with server management and deployment.
- A thorough understanding of user experience and product strategy.
- Experience implementing testing platforms and unit tests.
- The proven ability to write clean and well-documented code.
- Understanding the full web stack, from databases to server-side code to the quirks of cross-browser compatibility.
- Experience with the implementation of security and data protection protocols and policies.
- Experience working with graphic designers and in converting designs into visual elements.
- The proven ability to quickly and efficiently analyze problems and then offer effective and workable solutions.
- Self-development skills with a willingness to keep up to date with fast-changing trends.
- The ability to perform and oversee complex tasks and prioritize multiple tasks based on overall strategic goals.
- The proven ability to work independently and be self-motivated with minimal supervision and assistance.

- The ability to work within a fast-paced environment and be adaptable to change.
- The proven ability to be a team player with a collaborative orientation can effectively interact with and influence internal and external stakeholders.
- The capability to interact with multiple levels of the organization and serve as an influence leader and a team player.
- Strong presentation, facilitation, and written/verbal communication skills.

### **Education and Experience**

A Full Stack Developer candidate with a bachelor's degree in computer science, computer engineering, information systems management, or related field is required. The position requires an individual with [X+] years of experience as a developer. Candidates with experience in *[web development, database development, cloud development, etc.]* are preferred.

### **Travel and Work Requirements**

Occasional travel to other offices or educational conferences will be required. The nature of the position may occasionally require work to be performed at non-standard hours and on weekends.

### **Benefits**

*[Adjust for your situation]*

- Full-time position
- Competitive compensation with benefits
- Paid time off and paid holidays
- Medical and dental insurance coverage
- Casual dress code
- Flexible schedule
- Free parking

# V. INTERVIEW QUESTIONS AND NOTES FOR FULL STACK DEVELOPER

## INTRODUCTION

The purpose of any hiring interview, Full Stack Developer included, is to assess a candidate's expertise and experience. It's essential to tailor your questions to the specific role your prospective hire will be required to fill.

Questions about programming language proficiency, for example, should be specific to what is required for your project.

## Potential Interview Questions for Full Stack Developer Candidates and Notes for the Interviewer

### 1. What is your favorite programming language? What makes it your favorite?

- a) *A candidate may be proficient in several programming languages, but their favorite is likely to be their best language.*
- b) *It is best if their favorite matches your needed language.*
- c) *Listen to why it is their favorite to ascertain personality clues.*

### 2. For a Full Stack Developer, what are the most important qualities to have?

- a) *Full stack development requires a holistic approach to the development process, and the candidate's answer should reflect that.*
- b) *Look for phrases like front-end, back-end, user experience, coordination, and collaboration.*

**3. Ask the candidate to give an example of a specific project they worked on. What technologies did they use? Tell me about the methodology in deciding on how to proceed with the project?**

- a) A question designed to measure experience and decision-making processes.*
- b) Look for a thorough explanation about how they chose a specific toolset.*

**4. What is the most puzzling or frustrating programming challenge you have come across recently? How did you go about overcoming it?**

- a) Speaks to the candidate's problem-solving abilities.*
- b) Was the challenge overcome? What approach did they take? Was it efficient? Did they ask for help?*

**5. How you would optimize a website to be as efficient and scalable as possible?**

- a) There are dozens of possible optimization procedures, and the more the candidate can name, the better.*
- b) Look for phrases like optimize all assets, avoid inline JavaScript and CSS, leverage browser caching, reduce DNS lookups, etc.*

**6. If you had to develop a project from scratch in only one month, what technologies, programming languages, and frameworks would you use?**

- a) An experienced Full Stack Developer will be able to outline of their approach to this problem.*
- b) Less experienced developers may struggle to answer effectively.*

**7. What projects are you currently working on? Are you working on any side projects?**

- a) Full Stack Developers should be inquisitive and show initiative.*
- b) Current projects will reveal working experience. Side projects will demonstrate personal interest.*
- c) Coders are always coding.*

**8. Describe a time when you made a mistake in a project. What did you do, and how did you rectify it?**

- a) Everyone makes mistakes, and this often happens when programming. The key is how you go about rectifying your mistakes.*
- b) Did the candidate take ownership of the mistake?*
- c) Did the candidate seek help in rectifying the mistake?*

**9. Which do you enjoy more, execution and coding or operational management and design?**

- a) It is important for the candidate to distinguish their preference. If you are looking for a programmer, execution should be the preference.*
- b) If you are looking for an operational manager or designer, those should be the preference.*

**10. How do you stay abreast of developments in the technology industry? Have you attended any recent conferences or seminars? Are you learning a new programming language?**

- a) Another measure of intellectual curiosity.*
- b) In general, you would like to hire candidates driven to explore innovation.*

## VI. JOB AD: FULL STACK DEVELOPER

[Your company name] is searching for a highly skilled and motivated Full Stack Developer to work with a development team to create a storefront website for our organization that can handle all currencies, including cryptocurrencies. Successful candidates will be required to use PHP, HTML, CSS, Python, JavaScript, MySQL in a dynamic and collaborative working environment to achieve the specified organizational goal.

Successful candidates will have a bachelor's degree in computer science, computer engineering, information systems management, or a related field. The position requires an individual with 5+ years of experience as an application developer specializing in web development.

Successful candidates for the Full Stack Developer position will have:

- Experience with database design and management, including being up on the latest practices and associated versions.
- The proven ability to write clean and well-documented code.
- An understanding of the full web stack, from databases to server-side code to the quirks of cross-browser compatibility.

For more information and to apply for the position, read the full job description.

# VII. RECRUITMENT CHECKLIST



## 1. Kickoff: Define the position and process

- **Kickoff:** Set meeting or call with hiring manager and all internal and external stakeholders to fully understand the job and types of candidates desired.
- 



## 2. Update Job Description and Job Ads

- **Job Description:** Create or update description and ads, including remote work, safety, and benefits changes due to coronavirus. Incorporate your employer branding, including style and voice.
  - **“WIIFM?”:** “What’s in it for me?” Be very clear with candidates so your ad will stand out in the clutter of thousands of IT employment posts.
- 



## 3. Source candidates

Ensure you have a dedicated internal talent acquisition team or agency partner with the experience and time to focus on the IT position.

- **Source Passive Candidates:** Ads are not enough. Have a defined plan to source and engage passive candidates who are not looking at job ads.
  - **Reach Out to Previous Applicants:** Remember that #2 candidate, or the one who previously turned down the job?
  - **Use your employee referral program:** Tap into your existing workers’ networks. Make sure you have a robust incentive and process program in place if you want it to succeed.
- 



## 4. Screening and interviewing candidates

The tech market is still hot, and top talent won’t wait around to hear back from you. Most hiring breaks down because of delays in the interview processes and incomplete communication between the hiring manager and recruiting partners. Follow these tips:

- **Candidate Portal software:** Some applicant tracking systems have this built-in, and some recruiting partners (including Benchmark IT) can set up a portal for their clients. This keeps all candidates organized in one place online and avoids lost emails and delays.
- **Online Application:** Have a quick online application process that does not deter candidates.
- **Video Interview Tip Sheet:** Distribute helpful video guidelines and tips to internal managers and candidates to prepare for the best experience possible.
- **Standardize Interview Questions:** The nature of video interviews makes it difficult for both parties. Standardizing interview question enables you to compare apples to apples in the decision process, especially if various team members will be interviewing.
- **Schedule Feedback Session:** Verbal, prompt, and constructive feedback is KEY to filling a position quickly with a minimum of interviews. Schedule a feedback session with your TA/Recruiting team for the same or next day to promptly collect feedback.



## 5. Work with candidates throughout the process.

When conducting interviews, the number one rule is to respect the candidate and make sure they have a good experience, even if they aren't right for the role. Here's how to do that.

- **Be organized:** Interviews are as much about the candidate interviewing you and deciding if they want to work for your company, as it is about you choosing whether they are right for the role. You need to make a good impression.
  - **Ghosting Not Allowed:** Don't interview a candidate and then never speak to them again or wait three months to get back to them. Actively stay engaged with top candidates as your interview process continues. Let them know if you're not ready to make a decision or requirements have changed. If you don't, not only will the top candidates have already taken another role, but they'll also likely tell people to avoid your company.
- 



## 6. Make an offer

Finally, you've got a winner. Now you have to make them an offer. Don't drag this out. These tips can help you stay organized and get your new hire on board as quickly as possible.

- **Present your complete compensation package:** Including cash and non-cash compensation and benefits. Be clear about your current and post-covid remote work opportunities.
- **Negotiate:** Be prepared for some back and forth before you agree. Leverage the experience of your TA professional or external recruiting partner who has been working most closely with the candidate.
- **Include employee onboarding information:** When making an offer, send some company information, such as the employee handbook, schedule, and company culture. Make sure all information is updated and reflects current company COVID-19 policies and health safeguards.
- **Have a backup:** It might not work out with your first choice, so you need to have someone else in mind for the position. Keep the "next up" candidates apprised during the process. They will respect you for this. If you don't, they'll likely be gone or less interested, and you'll need to start the process all over again.