DDaT pay framework benchmarking for SEO Software Engineers

Contents

Programming and Build.

Uses agreed security standards and specifications to design, create, test and document new or amended software. This relates to code security, procedures such as passwords and writing security into code eg encryption.

SEO Description: Practitioner

You can collaborate with others when necessary to review specifications. You can use these agreed specifications to design, code, test and document programs or scripts of medium to high complexity using the right standards and tools. Contribute to code reviews and gives constructive feedback to others.

Developing (4)

- You can collaborate with others to review specifications and use them to design, code, test, and document programs of medium complexity. You can also participate in code reviews and provide constructive feedback to others.
- You have practical knowledge of at least one programming language and a good understanding of emerging technologies for software development.

Proficient 2 – (5)

- You can collaborate with others to review specifications and use them to design, code, test, and document programs of medium complexity. You can also participate in code reviews and provide constructive feedback to others.
- You have practical knowledge of at least one programming language and a good understanding of emerging technologies for software development **and evaluate these technologies through proof of concepts.**
- **You can convert requirement specifications into technical tasks for parallel development. You also have practical experience creating quality-built APIs or similar services/components.**

Proficient - 1 (6)

- You can collaborate with others to review specifications and use them to design, code, test, and document programs of medium complexity. You can also participate in code reviews and provide constructive feedback to others.
- You have practical knowledge of at least one programming language and a good understanding of emerging technologies for software development and evaluate these technologies through proof of concepts.
- You can convert requirement specifications into technical tasks for parallel development. You also have practical experience creating quality-built APIs or similar services/components..
- **You have a strong understanding of service-based integration. You have experience of developing microservices and working with relational or non-relational databases.**
- **You have practical knowledge of setting up and maintaining CI/CD pipelines, as well as automating development tasks using appropriate tools and scripts.**

Accomplished (7)

- You can collaborate with others to review specifications and use them to design, code, test, and document programs of medium complexity. You **can lead code reviews** and provide constructive feedback to others.
- You have practical knowledge of at least one programming language and a good understanding of emerging technologies for software development and evaluate these technologies through proof of concepts.
- You can convert requirement specifications into technical tasks for parallel development. You also have practical experience creating quality-built APIs or similar services/components.
- You have a strong understanding of service-based integration. You have experience of developing microservices and working with relational or non-relational databases.
- You have practical knowledge of setting up and maintaining CI/CD pipelines, as well as automating development tasks using appropriate tools and scripts.
- **You can evaluate different code quality and testing tools/techniques and share examples of best practices to the team.**

- **You have a good understanding of design patterns and can ensure effective code maintainability.**

Function and Non-Functional testing.

Able to analyse changes to, or the development of, products and services and test design. Able to run and manage appropriate tests to ensure that requirements have been fully met. Understands and is able to identify the most effective techniques, data sets and tools to use. Able to communicate defects or trends clearly to software developers, outlining how defects are identified and the possible causes. Able to design, or provide assurance for, appropriate risk-based end-to end system integration test models.

SEO Description: Practitioner

Able to design, implement and execute a wide range of functional and non-functional testing techniques. Able to effectively communicate test results to both technical and non-technical stakeholders. Able to make decisions on running types of, and environments for testing. Able to raise defects with the business and help prioritise them based on defect severity. Able to think outside the box, ask the right questions and critically evaluate findings. Leads investigative work into problems and opportunities with existing processes, driving the collection of information and creation of recommendations for improvements. Can absorb large amounts of conflicting information and use it to determine solutions.

Developing (4)

- You have a diverse skill set in testing techniques and can effectively communicate test results to both technical and non-technical stakeholders. Additionally, you can train others in different testing tools and techniques.
- You are experienced in identifying and recording defect, you can ensure that defects are appropriately documented for resolution by yourself or a team member. Furthermore, you can provide unit testing and code assurance through system and integration tests.

Proficient 2 – (5)

- You have a diverse skill set in testing techniques and can effectively communicate test results to both technical and non-technical stakeholders. Additionally, you can train others in different testing tools and techniques. **You can also design and execute a wide range of non-functional testing techniques and communicate non-functional test results to stakeholders.**
- You are experienced in identifying and recording defect, you can ensure that defects are appropriately documented for resolution by yourself or a team member. Furthermore, you can provide unit testing and code assurance through system and integration tests. **You can also perform smoke testing for builds and utilise CI/CD to run smoke tests.**
- **You can think creatively to identify different use case scenarios to be tested. You can define these test cases using Gherkin syntax or any other TDL (Test Description Language) approach.**

Proficient - 1 (6)

- You have a diverse skill set in testing techniques and can effectively communicate test results to both technical and non-technical stakeholders. Additionally, you can train others in different testing tools and techniques. You can design and execute a wide range of non-functional testing techniques **and can write test functional/non-functional test templates.**
- You are experienced in identifying and recording defect, you can ensure that defects are appropriately documented for resolution. Furthermore, you can provide unit testing and code assurance through system and integration tests, performing smoke testing for builds**, and utilising CI/CD to run automated system/integration tests.**
- You can think creatively to identify different use case scenarios to be tested. You can define these test cases using Gherkin syntax or any other TDL (Test Description Language) approach.
- **You can advise others on testing techniques/tools and frameworks.**

- **You have a good understanding of Shift Left[1] approach in testing paradigm and can contribute to implement this approach throughout the SDLC.**

Accomplished (7)

- You have a diverse skill set in testing techniques, effective communication with stakeholders, and the ability to train others. Can design and execute non-functional testing techniques and can write test functional/non-functional test templates.
- You are experienced in identifying and recording defect, providing unit testing and code assurance, performing smoke testing, and utilising CI/CD. Ensures appropriate documentation of defects and resolutions.
- You can identify use case scenarios and define test cases using Gherkin syntax or any other TDL. Furthermore, you can advise on testing techniques/tools, and contributes to implementing the Shift Left approach throughout the SDLC.
- You can also Identify the best technology/test framework for different business scenarios.
- **You can maintain quality assurance traceability, executes test cases, prepares test logs, and reports defects in a timely manner**.
- **You can capture and share test results to provide a comprehensive picture of software quality. Can come up with different business scenarios for requirement specification and has knowledge of various tools and techniques to create templates for team members.**

Service Support.

You can maintain and support services.

SEO Description: Practitioner

Identifies, locates, and competently fixes faults. Able to investigate undocumented issues and develop fixes. Can triage issues and build stories for more involved issues, document processes and support more junior colleague.

Developing (4)

- You can collaborate with the team to conduct an initial investigation and triage user reported issues.
- You can ensure that the applications developed by you incorporate the right levels of logging to facilitate operational support, including monitoring and debugging.

Proficient 2 – (5)

- You can collaborate with the team to conduct an initial investigation and triage user reported issues.
- You can ensure that the applications developed by you incorporate the right levels of logging to facilitate operational support, including monitoring and debugging.
- **You can take a proactive approach to collaborate with support teams to recognise and fulfil new logging and monitoring needs, thereby reducing the application's Mean Time To Recover (MTTR).**

Proficient - 1 (6)

- You can collaborate with the team to conduct an initial investigation and triage user reported issues.
- You can ensure that the applications developed by you incorporate the right levels of logging to facilitate operational support, including monitoring and debugging. **You can also implement log monitoring tools to support service availability.**
- You can take a proactive approach to collaborate with support teams to recognise and fulfil new logging and monitoring needs, thereby reducing the application's Mean Time To Recover (MTTR).
- **You have a good understanding of the Shift Left approach to service support and can contribute to implementing this approach throughout the Software Development Life Cycle (SDLC).**

Accomplished (7)

- You can collaborate with the team to conduct an initial investigation and triage user reported issues.

[1] Shift-left is the practice of moving testing, quality, logging, monitoring, and performance evaluation early in the software development process, thus the process of shifting to the “left” side of the SDLC.

- You can ensure that the applications developed by you incorporate the right levels of logging to facilitate operational support, including monitoring and debugging. You can also implement log monitoring tools to support service availability.
- You can take a proactive approach to collaborate with support teams to recognise and fulfil new logging and monitoring needs, thereby minimising the application's Mean Time To Recover (MTTR).
- You have a good understanding of the Shift Left approach in the service support paradigm and can contribute to implementing this approach throughout the Software Development Life Cycle (SDLC).
- **You ensure that the systems and applications developed by the team are operational and sustainable by conducting effective code reviews that consider cost implications and environmental impact.**
- **You can contribute to define code templates for efficient application and system logging, as well as evaluating and determining the best use of technology/tools for specific contexts.**

Communication between technical and non-technical

Able to communicate effectively across organisational, technical, and political boundaries, understanding the context. Able to advocate and communicate what a team does to create trust and authenticity. Can successfully react and respond to challenge.

SEO Description: Practitioner

Able to listen to the needs of technical and business stakeholders and interpret them. Able to manage stakeholders' expectations and be flexible, is capable of proactive and reactive communication. Facilitates difficult discussions within the team or with diverse senior stakeholders.

Developing (4)

- You can gather and interpret requirements from technical and business stakeholders by actively listening, asking pertinent questions, and engaging in meaningful discussions.
- You can facilitate intra-team discussions to identify viable technical solutions aligning with business requirements, while also contributing to team growth through mentoring and clear explanations of complex technologies.

Proficient 2 – (5)

- You can gather and interpret requirements from technical and business stakeholders by actively listening, asking pertinent questions, engaging in meaningful discussions **and facilitate the integration of user stories in SDLC process.**
- You can facilitate intra-team discussions to identify viable technical solutions aligning with business requirements, while also contributing to team growth through mentoring and clear explanations of complex technologies.
- **You can facilitate seamless communication between technical and non-technical stakeholders, aiding in explaining technical solutions, managing feedback, and providing timely insights to senior stakeholders to help them understand technical solutions more effectively.**

Proficient - 1 (6)

- You can gather and interpret requirements from technical and business stakeholders by actively listening, asking pertinent questions, engaging in meaningful discussions and facilitate the integration of user stories in SDLC process.
- You can play a key role in facilitating intra-team discussions to identify viable technical solutions aligning with business requirements, while also contributing to team growth through mentoring and clear explanations of complex technologies.
- You can facilitate seamless communication between technical and non-technical stakeholders, aiding in explaining technical solutions, managing feedback, and providing timely insights to senior stakeholders to help them understand technical solutions more effectively.
- **You can facilitate difficult discussions within the team and/or with diverse senior stakeholders.**
- **You can proactively provide relevant information to key stakeholders for effective expectation management.**

Accomplished (7)

- You can gather and interpret requirements from technical and business stakeholders by actively listening, asking pertinent questions, engaging in meaningful discussions and facilitate the integration of user stories in SDLC process.
- You can **lead intra-team discussions** to identify viable technical solutions aligning with business requirements, while also contributing to team growth through mentoring and clear explanations of complex technologies.
- You can facilitate seamless communication between technical and non-technical stakeholders, aiding in explaining technical solutions, managing feedback, and providing timely insights to senior stakeholders to help them understand technical solutions more effectively.
- You can facilitate difficult discussions within the team and/or with diverse senior stakeholders.
- You can proactively provide relevant information to key stakeholders for effective expectation management.
- **You can advocate / communicate the best software development practices to both technical and non-technical stakeholders.**
- **You can identify key users and stakeholders, and ensure they are readily available to help clarify the requirements.**