merpay

Merpay QA DevDojo

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Speaker Introductions



Masatoshi Sato / @satomasa

Masatoshi spent roughly a decade working for a third-party verification company, where he acquired experience working on QA of a variety of systems. He then worked on QA at a number of business companies before joining Merpay. At Merpay, he is in charge of QA of merchant-related features on the Partner Platform Team.



Yasuhiro Kawasaki / @Yasuhiro

Yasuhiro started his career at a cram school straight out of university, and then took an interest in software development and shifted his career toward the tech industry. He has been working in testing ever since. He joined Merpay in October of 2021, where he is in charge of QA for credit-related services.



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Agenda

- **01** What is QA?
- **02** The QA Process
- **QA** is for Everyone
- **04** Summary



What is QA? QA stands for quality assurance.



"Quality is value to some person."

—Gerald M. Weinberg



The level of quality required varies depending on the conditions and situation.

The fundamental concept of quality assurance is how we assure and verify that the required level of quality is provided reliably.



Example of Quality Assurance

- Establishment of Quality Standards
 - Setting standards to meet a certain level of quality
- Standardization of Documents
 - Standardization of formats for specifications, development design documents, test cases, etc
- Development Process Optimization
 - Optimizing the development process to ensure quality



Why is QA necessary?

Releasing without performing proper QA leads to higher risk of incidents and the following potential risks:

- Reliability decline
- Additional costs
- Legal risks

Reliability decline

If incidents occur frequently, trust in our products and services declines, and we risk losing the trust of our customers and the market.



- Loss of customers
- Decrease in customer satisfaction and damage to our brand image
- Impact on future revenue and growth





Additional costs

We may incur additional costs (time, money, etc.) for incident handling and recovery tasks.





Legal risks

If incidents that infringe on legal requirements occur, it may cause a major social problem. (We may be forced to suspend our business.)



QA is highly crucial in order to avoid these risks.

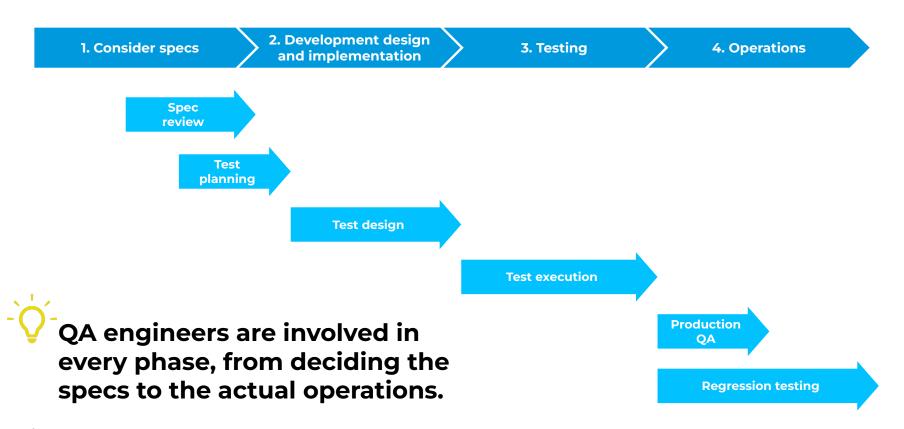


Next, we will introduce the QA process at Merpay.



Merpay QA Process

QA Process Overview





Phase 1: Consider specs



Attend spec review sessions

- Check impact on existing system/other microservices
- Make suggestions based on past experience

Analyze and plan tests

- Determine scope of tests
- Decide on plan for testing
- Determine risks
- Scheduling







Phase 2: Development design and implementation



Design tests

- Create test viewpoints and test cases
- Hold test case review sessions
- o Implement test code
- Attend development design review sessions
- Perform readiness check







Phase 3: Testing



Execute tests

- o API and UI tests
- Regression tests (including automation)

Analyze bugs

• Visualize bugs and analyze bug trends

Perform dogfooding

Test features on employees before release





Phase 4: Operations



Production check

• Test features after release to check for issues

Regression testing

- Do regression testing regularly
- Perform regression maintenance

Improve automated testing

Perform maintenance on automated tests

• Improve upon issues

Hold retrospectives, etc.





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The QA Process

The basic process is similar for all teams, but in some cases operations may differ slightly, so please check with the QA engineer of the relevant team for details.

Also!

At Merpay, QA engineers are involved in every step along the way, from deciding the specs to the release and the operations after release, so please don't hesitate to get us involved in any small way!



Is QA something only the QA Team and QA engineers should remain aware of?



Is **QA** something only the **QA** Team and **QA** engineers should remain aware of?

No, not at all!

It's important that not only the QA Team but everyone maintain a common awareness toward quality assurance.



People of all roles, in every process, should aim to deliver the very best quality, and continue to make improvements.



This creates a product of higher value.



- Implementing and furthering automated tests
 - Work with backend and frontend engineers to further automated testing
 - Installation and Operation of scenarigo
- Improving QA efficiency
 - Work together to consider ways to ensure quality effectively, and make QA tasks more efficient
 - GoによるSQLクエリテストの取り組み
- Holding retrospectives for incidents
 - When an incident occurs, the whole team should consider ways that the team (not an individual) can prevent reoccurrences, and implement improvement measures



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Summary

- **QA(Quality Assurance) is assuring and verifying quality**
- Inadequate QA(Quality Assurance) can lead to the occurrence of risks
- QA(Quality Assurance) is for everyone—let's work together to create the very best product



Thank you for listening!