Understanding GitHub Actions Workflow Failures

1. Which of the following roles describes you the best? *

    Mark only one oval.

    ◯ Developer

    ◯ Architect

    ◯ Technical Lead

    ◯ Test Engineer

    ◯ Other: _____

2. How many years of professional experience do you have in your field? *

    Mark only one oval.

    ◯ <3 years

    ◯ 3-5 years

    ◯ 6-10 years

    ◯ >10 years

3. How would you describe your experience with GitHub Actions workflows? *

    Mark only one oval.

    ◯ Novice

    ◯ Advanced Beginner

    ◯ Competent

    ◯ Proficient

    ◯ Expert

4. In the past 12 months, how often do you experience workflow failures when using GitHub Actions? *

Mark only one oval.

- ◯ Never
- ◯ Rarely
- ◯ Sometimes
- ◯ Often
- ◯ Always

In this section, please specify the frequency of workflow failure reasons related to the project itself.

5. How often do you encounter project compilation failures in GitHub Actions due to issues in the source code (e.g., defects, programming errors)? *

Mark only one oval.

- ◯ Never
- ◯ Rarely
- ◯ Sometimes
- ◯ Often
- ◯ Most of the time
- ◯ I don't know.

6. How often do you encounter project build failures in GitHub Actions due to configuration mistakes or issues (e.g., incorrect paths, wrong environment variables)?   *

Mark only one oval.

- Never
- Rarely
- Sometimes
- Often
- Most of the time
- I don't know.

7. How often do you encounter project build fails due to unresolved dependencies when using GitHub Actions?   *

Mark only one oval.

- Never
- Rarely
- Sometimes
- Often
- Most of the time
- I don't know.

8. How often do you encounter project build fails due to dependency conflicts when using GitHub Actions?   *

Mark only one oval.

- Never
- Rarely
- Sometimes
- Often
- Most of the time
- I don't know.

9. How often do you encounter failures due to the code does not pass pre-defined *
   quality checks (e.g., code or comment style conventions, coverage) when using
   GitHub Actions?

   Mark only one oval.

   ( ) Never

   ( ) Rarely

   ( ) Sometimes

   ( ) Often

   ( ) Most of the time

   ( ) I don't know.

10. How often do you encounter failures due to the project contains potential *
    vulnerabilities when using GitHub Actions?

    Mark only one oval.

    ( ) Never

    ( ) Rarely

    ( ) Sometimes

    ( ) Often

    ( ) Most of the time

    ( ) I don't know.

11. How often do you encounter failures due to performance degration is *
    detected when using GitHub Actions?

    Mark only one oval.

    ( ) Never

    ( ) Rarely

    ( ) Sometimes

    ( ) Often

    ( ) Most of the time

    ( ) I don't know.

12. How often do you encounter software tests failure when using GitHub Actions? *

Mark only one oval.

- ( ) Never
- ( ) Rarely
- ( ) Sometimes
- ( ) Often
- ( ) Most of the time
- ( ) I don't know.

In this section, please specify the frequency of workflow failures due to non-project-related reasons.

13. How often do you encounter workflow build failures in GitHub Actions due to hardware or resource limitations? *

Mark only one oval.

- ( ) Never
- ( ) Rarely
- ( ) Sometimes
- ( ) Often
- ( ) Most of the time
- ( ) I don't know.

14. How often do you encounter workflow execution failures due to configuration   *
    issues or incorrect instructions in the workflow?

    Mark only one oval.

    ◯ Never

    ◯ Rarely

    ◯ Sometimes

    ◯ Often

    ◯ Most of the time

    ◯ I don't know.

15. How often do you encounter workflow execution failures in GitHub Actions due   *
    to network connection issues?

    Mark only one oval.

    ◯ Never

    ◯ Rarely

    ◯ Sometimes

    ◯ Often

    ◯ Most of the time

    ◯ I don't know.

16. How often do you encounter workflow environment setup failures in GitHub   *
    Actions due to dependency issues (e.g., missing compiler)?

    Mark only one oval.

    ◯ Never

    ◯ Rarely

    ◯ Sometimes

    ◯ Often

    ◯ Most of the time

    ◯ I don't know.

17. How often do you encounter access to third-party services failures due to   *
    permission issue when using GitHub Actions?

    Mark only one oval.

    ◯ Never

    ◯ Rarely

    ◯ Sometimes

    ◯ Often

    ◯ Most of the time

    ◯ I don't know.

18. How often do you encounter failures due to the required GitHub action cannot   *
    be resolved when using GitHub Actions?

    Mark only one oval.

    ◯ Never

    ◯ Rarely

    ◯ Sometimes

    ◯ Often

    ◯ Most of the time

    ◯ I don't know.

19. How often do you encounter failures due to Github API rate limit is exceeded in   *
    Github Actions?

    Mark only one oval.

    ◯ Never

    ◯ Rarely

    ◯ Sometimes

    ◯ Often

    ◯ Most of the time

    ◯ I don't know.

20. How often do workflows fail due to version control management issues (e.g., *
    merge conflicts, duplicate release tags) when using GitHub Actions?

    Mark only one oval.

    ( ) Never

    ( ) Rarely

    ( ) Sometimes

    ( ) Often

    ( ) Most of the time

    ( ) I don't know.

21. Have you encountered any other types of workflow failures (if so, please specify
    the reason)?

    _____

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    _____

    _____

22. What are the major difficulties you face when dealing with the GitHub Actions
    failures?

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    _____

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23. How would you prevent these failures?

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24. What kind of tools or support would you like to have to help you prevent or deal with Github Actions failures?

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Closing

25. If you'd like to receive a notification when we publish the results of the survey, please leave your email here. We will not use this email for any other purpose except for notifying you of our research findings.

_____

26. If you're willing to participate in an interview about the GitHub Actions workflow failures, please leave your email address here.

_____

27. Thanks so much for getting this far! Any questions, comments or concerns you'd like to tell us about?

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