#### As someone who cares about the kernel...

- I want to be notified (through bisection reports) of regressions caused by patches I wrote or was involved in so that I can see the logs in the KernelCI web interface, investigate and reproduce the issue.
  - a. Today we only show KernelCI regressions and it is not integrated with KCIDB (yet) as there is no regression identification support there.
- 2. I want to be notified of resolved regressions caused by patches I wrote or was involved in *so that* I know when I can stop worrying about it and which patch caused the regression.

# As a kernel/subsystem maintainer...

- I want to check for regressions in my branch for specific commit heads tested by KernelCl so that I can fix the issues or remove the culprit patches before sending a pull request
  - a. In the case of stable trees I want to check if a new stable release candidate has any regression compared to the previous stable release
  - b. If it is a performance regression, I want to see a comparison between the current and previous data for the testcases. Additionally, historical trends can be created to help understand the impact of deviations.
  - c. Boot time and measuring the kernel binary size are two basic test cases we want to see, including historical trends for different .config files.
- 2. I want to check if a failure/regression doesn't happen in any other branches we have results for so that I can investigate the source of the issue.
- 3. I want to know if my code/subsystem is being tested, including a coverage report detailing tests and percentage of coverage per platform so that I can look into increasing the coverage where needed. (github comment)
- 4. I want to see, for large test batches, a separation between tests that flake and tests that are showing new failures (i.e., they start to fail consistently) so that I can be notified without the noise of flake tests all the time. (github comment)
  - a. This could probably be generalized to some sort of statistical operation.
     Generally, any deviation from the normal result pattern could be reported.
- I want to see automatic review replies with a Tested-by tag if the patchset successfully passed all tests so that I know that KernelCI finished all its tests (github comment)

# As a driver developer/maintainer...

- 1. I want to see all boots and tests for a specific hardware/driver so that I can investigate the behavior of the driver in many different scenarios.
- 2. I want to see all tests that include a specific commit so that I can investigate the behavior of the patch in many different platforms and scenarios.

3. I want to be able to run a reduced set of tests, such as smoke-tests running for only a few minutes, to get quick feedback *so that* I can identify big failures earlier before pushing for longer and more elaborated testing. (maintainers could use different branches for quick and deep test runs).

### As a downstream/product branch maintainer...

- 1. I want to be sure that stable releases are well tested and don't have regressions. If they do have regressions, I want to know what they are before merging a stable release into our downstream branches so that I can minimize the issues with my product kernel.
  - This means we may need to highlight certain releases in the Web Dashboard so it is easy for users to find and navigate through them.

#### As an OEM/Hardware vendor...

 I want to see all results for a specific platform on mainline, next and various stable releases so that I can plan kernel upgrade efforts and where to focus development on.

### As a DUT lab operator...

1. I want to view the status of hardware, jobs schedule and the history of jobs for a specific lab so that I can understand how my lab is performing for KernelCl and look into improvements to my infrastructure to optimize usage.

## As a regular/curious KernelCl.org visitor...

- 1. I want to see the new regressions highlighted in the dashboard so that I can navigate through them and study different regressions in the kernel.
- 2. I want to see pass/fail trends (graphs, histograms, etc..) filtered in various ways possible.
- 3. I want to see job history on all devices with a specific hardware / SoC
- 4. I want to see a list of all hardware / SoC currently tested in all labs

### Extra or more specific requests...

- I want to request KernelCI to automatically test a specific patchset on a specific set
  of kernel trees with a specific kernel config so that I can test my patches on a variety
  of platforms I don't have physical access to. Such a request can happen as a
  response to a regression (in this case we can link the submission to the dissection
  report) or at will by the kernel developer. (github comment)
  - a. may be possible only with native tests today

- b. we would need to flag which tests/platform will support this feature
- c. not a feature for the first iteration of the dashboard
- I want to slice and dice warnings by toolchain and toolchain version so that I can see which errors or warnings are compiler specific or need to be fixed.
  - d. it would require a lot of parsing to compare the warning logs, possibly creating an log item for each warning
  - e. not a feature for the first iteration of the dashboard