Stage 3 Proposals and Implementors

Communication while working towards Stage 4

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A *Sad* Story
A funny thing happened on the way to stage 4…

Array grouping proposal

- Currently a stage 3 proposal - Achieved stage 3 on 14 Dec 2021

- During that Dec 2021 meeting concerns were raised about naming.
  Presented the names `groupBy` / `groupByMap`
  Poll results led to rename to `groupBy` / `groupByToMap`

- Implementors started implementing …

- Another rename happened at June 2022 meeting
  `groupBy` / `groupByToMap` → `group` / `groupToMap`

Another Naming Concern

Seems like adding Array methods always causes problems!

- New issue with `group` was found by Mozilla in Nov 2022.

- Bikeshedding ensued … many alternates discussed … nothing decided yet
  See proposal issue #44

- Issue was discussed at Nov/Dec 2022 meeting.
  Stay the course, New name(s), or Static methods proposed - No conclusion.

- A Call was put out for implementors to **Not Ship**.

- But, the JSC team had already enabled `group` / `groupToMap` Aug 3, 2022.
  … and it was **shipped** in Safari 16.4!

Communication Breakdown
Some issues

- Implementor delegates may not know what has landed by team members.

- Proposal champions could mark a proposal as **Do Not Ship**.
  … However implementors would have to poll.

- Proposal champions may not know what implementations they should alert.

What If ….

… every Stage 3 or higher proposal had implementation status

- Consider RegExp V flag proposal page:

Implementations

- SpiderMonkey/Firefox
- V8/Chrome, enabled by default in V8 v11.2 / Chrome 112 (behind the `--harmony-regexp-unicode-sets` flag in earlier versions)
- JavaScriptCore/Safari, enabled by default in Safari Technology Preview 166
- Babel via regexpu-core
- ICU class UnicodeSet can be built from a string with syntax like a regular expression character class. UnicodeSet has long supported set operations and multi-character strings, and recently (in ICU 70) added support for emoji properties of strings.
- C++ SRELL (`std::regex` -like library)

(Meta) Proposal
Two Way Communication

Each stage 3+* https://github.com/tc39/proposal-XXX page includes an **Implementations** section.

- For each current, expected or related implementation, that section includes:
    - ✓ Each listed implementation's status of the proposal.
    - ✓ If possible, a link to the bug in the implementor's issue tracking system.
    - ✓ If possible, a TC39 member contact for issues, stage changes, etc.

‣ Implementors are responsible for letting champions know status changes.

‣ Champions are responsible for timely communication with implementors when issues arise or the stage changes.

*Maybe this should be stage **2+**.*

Discussion

Q / A