QAMP 2021 : Ecosystem

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Voice : Neural network cloned voice of Michaël Rollin

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Problem ?

- Community getting bigger and more and more project appear that need to be recognized and supported
  - But not a single list of them
- Constant evolvement of framework may lead to breaking changes for dependent projects

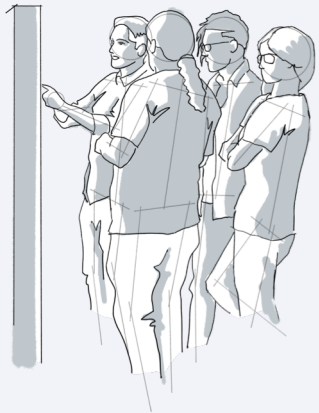
Solution → Ecosystem !

The Ecosystem consists of projects, tools, utilities, libraries and tutorials from a broad community of developers and researchers. The goal of the Ecosystem is to recognize, support and accelerate development of quantum technologies using Qiskit.

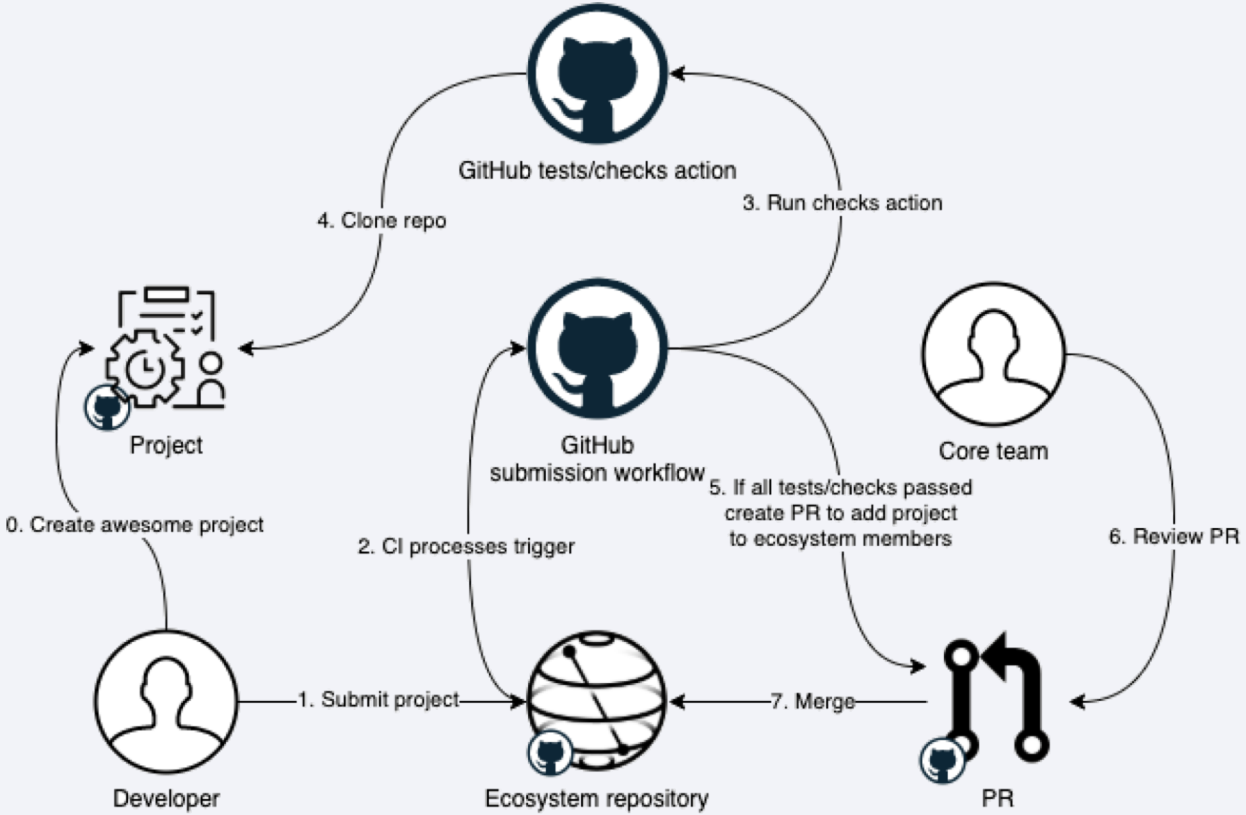
- ❑ Tests check / weekly maintainability reports (runs tests against stable and dev version of Qiskit and notify of any breaking changes)
- ❑ Database to get together every project using qiskit (IBM, community, external, ...)
- ❑ Badging of approval projects by Qiskit
- ❑ Sharing projects everywhere we want

How does it works ?

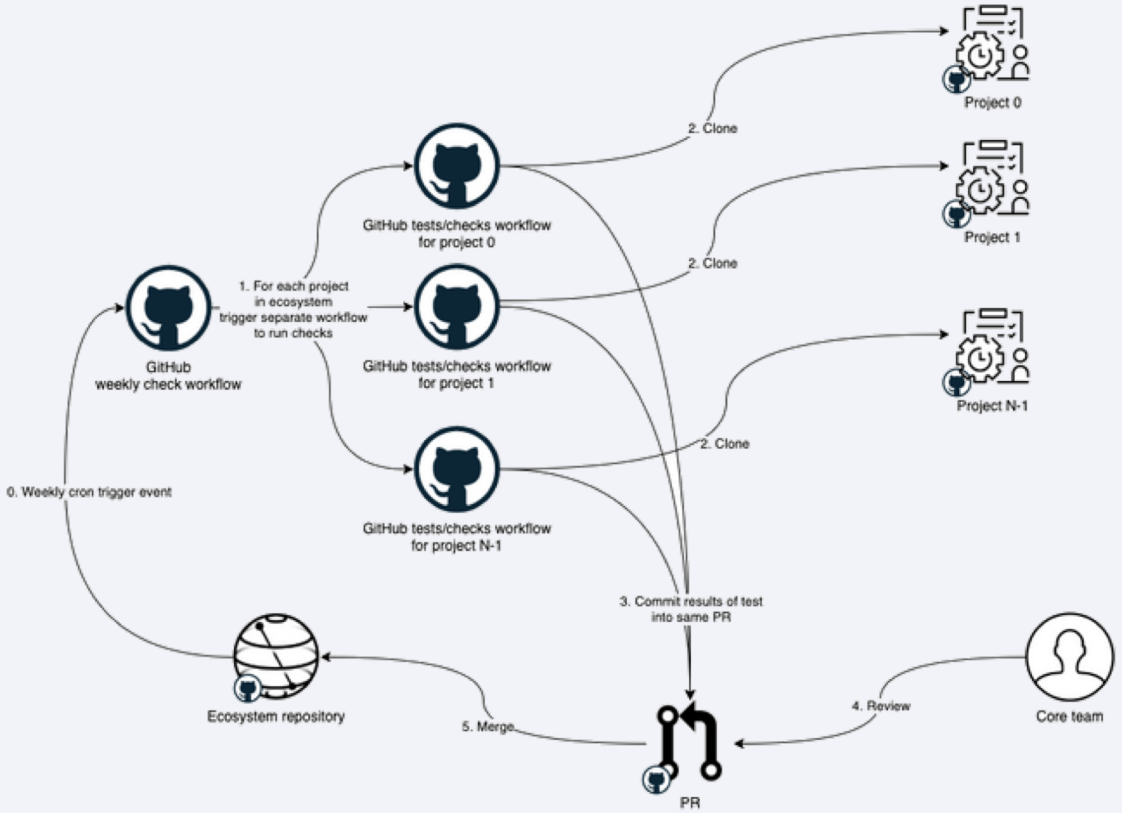
- Pure open-source and handled inside GitHub
- 2 workflows :
  - Submission - is a form to join ecosystem for developers
  - Weekly check - weekly cadence checks that all project in Ecosystem are always in sync with Qiskit



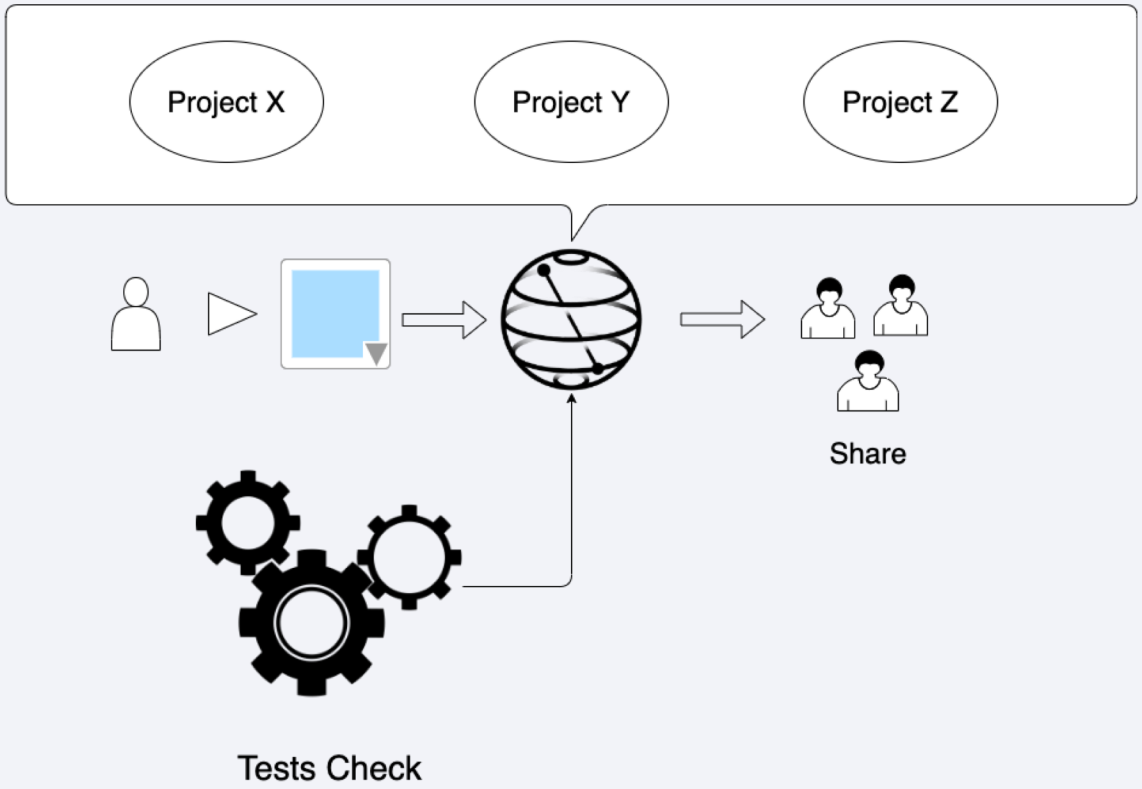
Submission workflow



Weekly check workflow

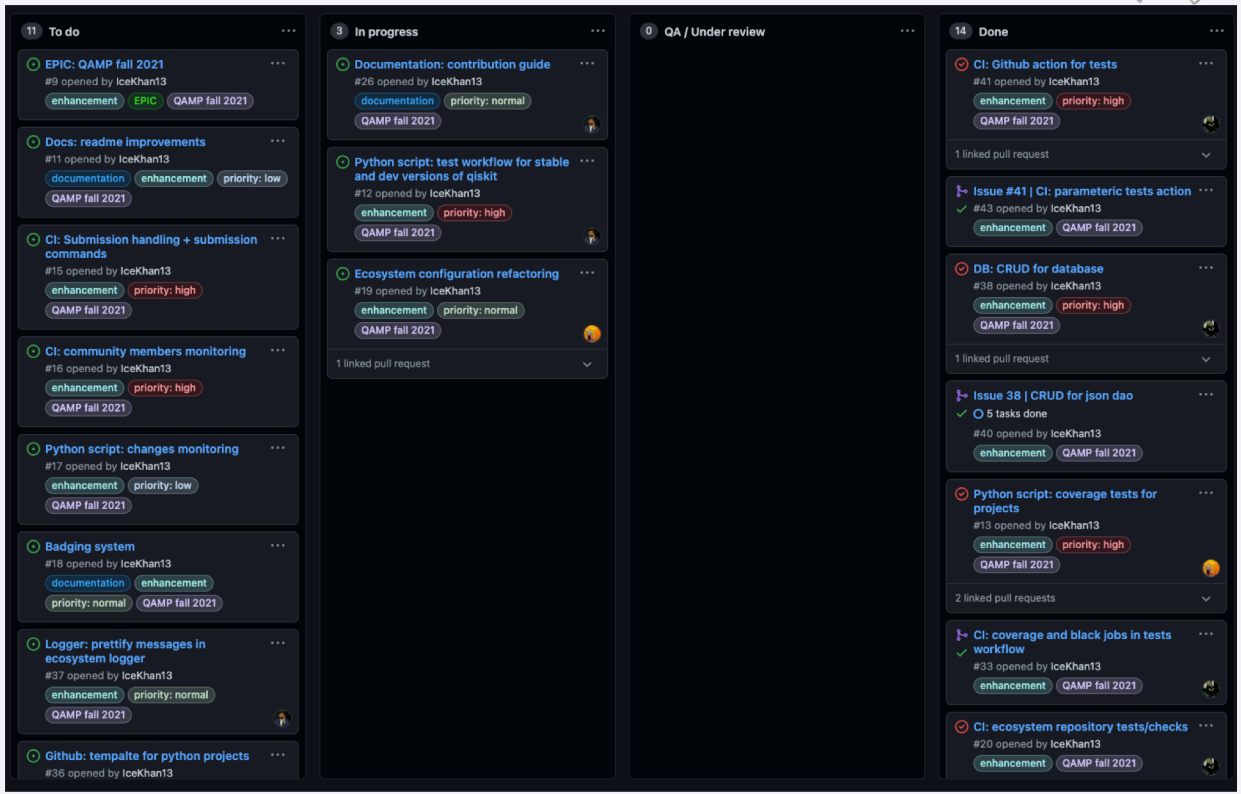


Functional structure



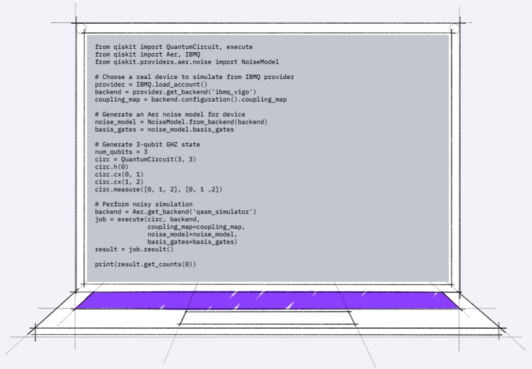
Current state

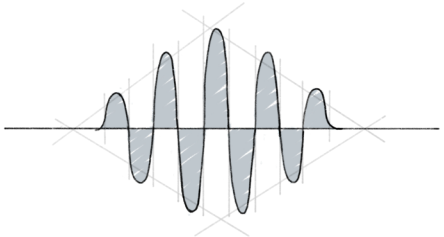
- ❑ Function US
  - Most of base scripts
  - CI process 🔄
- ❑ No-functional US
  - Tests improving 🔄
  - Documentation 🔄
- ❑ Quality US
  - Templating project ✕



Roadmap

- Actual goal :
  - Functional 2 workflows for Python projects
  - Documentation ready
  - Optional : add 2 projects in Ecosystem
- Future goal (or if we have time) :
  - Add projets to Ecosystem
  - No-python project → Docker, micro-qiskit, ...



Thanks for your attention !

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