

Halftime - Developing an Open Source Performance Benchmarking Git Bot

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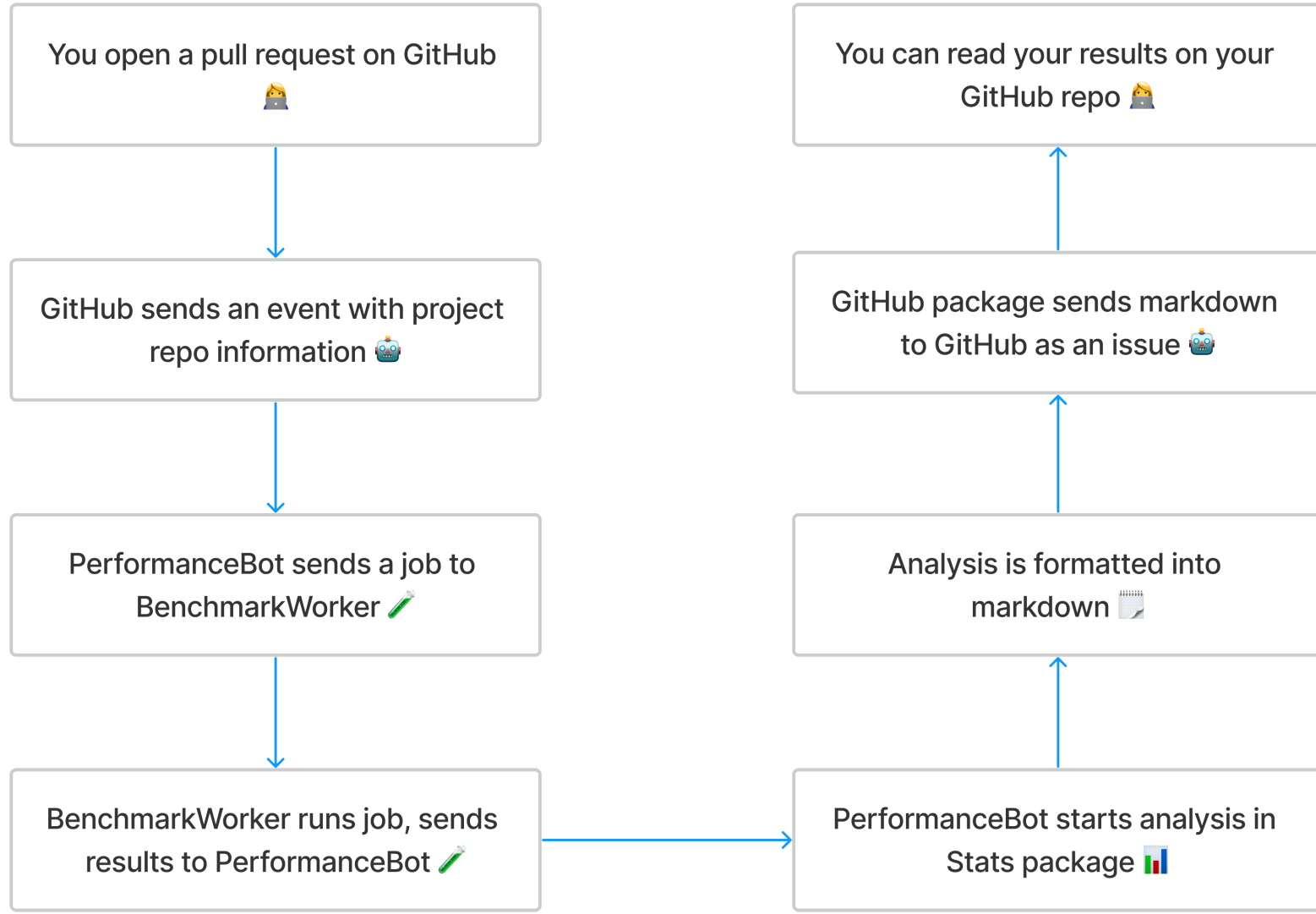
The Problem

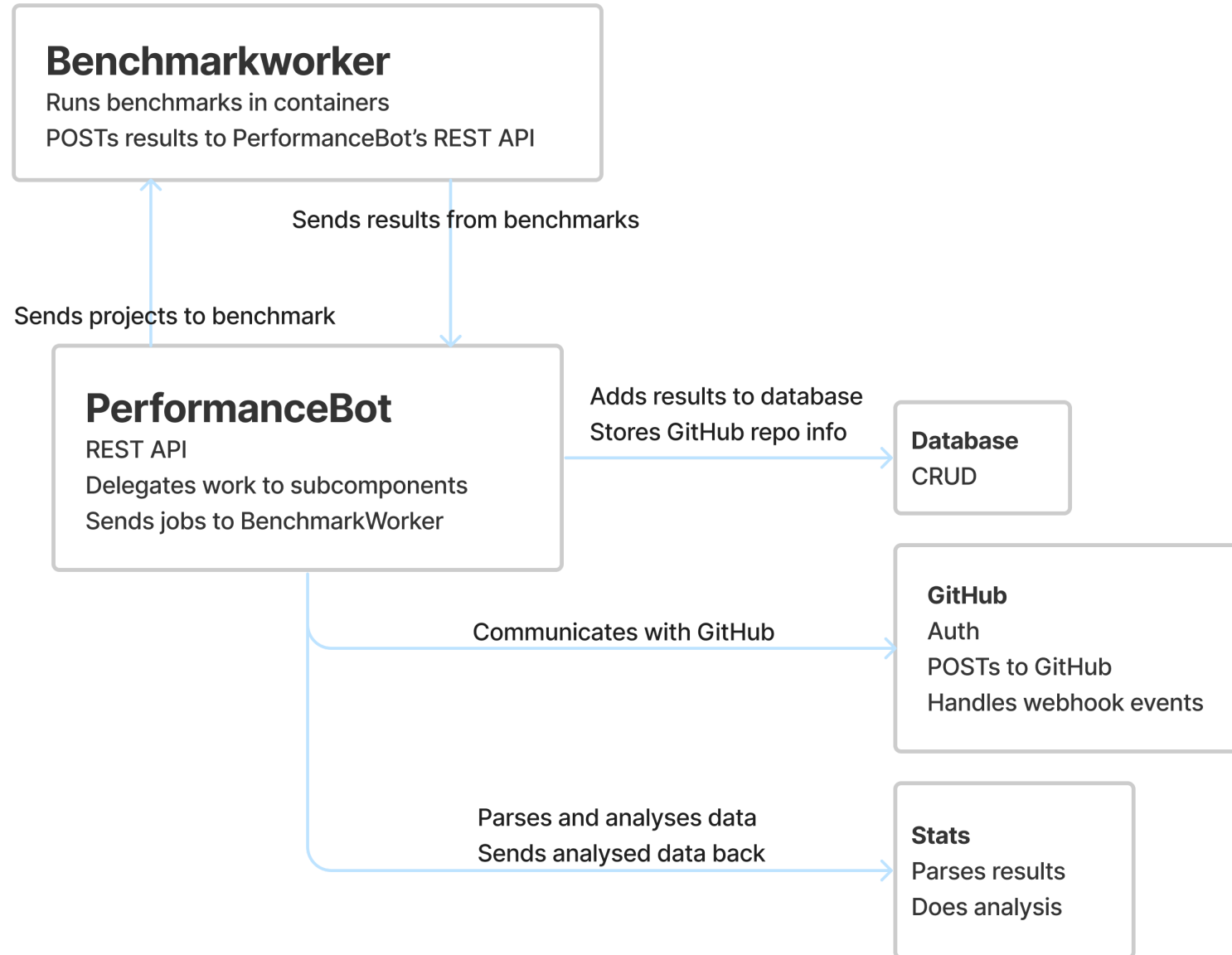
Using Continuous Integration (CI) for evaluating programs is necessary for a project's longevity, and is most commonly based on running tests - **it works or it doesn't**.

What about performance? Few tools exist to run performance benchmarks in projects, and bugs slowing down the code remain hidden as a result. Similar CI tools for this kind of evaluation barely exist at all.

Our Task

Provide a **GitHub Bot** for developers who wants to measure their projects' performance continuously.





Progress and Continuation - Development

Progress

- Receive webhook events
- Run code in containers
- Store results in database
- Open GitHub issue with results

Upcoming

- **Statistical analysis and presentation**
- **Configurability** - build tools, which tests to run, etc.
- **Deployment** - ship the bot and make it available for public use

Scientific Relevancy and our Thesis

- Eliminating unnecessary work
- Providing inspiration
- Establishing a basis for future work

Evaluation Ideas

- Running large projects
- Communication

Some Experiences

- Large stack
- Learning by doing
- Going from low level to high level languages

Questions?