Level up with GitHub actions, bots and CI/CD

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Set up CI/CD

- Development approaches
- Integrate/Deploy more often to alleviate surprises and challenges during production
- CD is a step further
- Thrusts automation and reduces human intervention

Example: https://github.com/manaswinidas/kogito-docs

Reference: https://www.growingwiththeweb.com/2016/07/enabling-pull-requests-on-github-wikis.html

Building GitHub actions

GitHub Actions (as for other CI/CD services/platforms):

- Triggers on events
- Prepare environment(s)
- Runs workflow(s)
- Report results

Types of actions

- Dockerfile action:
 - Environment defined by container layers
 - Workflow defined by entry point bash script
- JavaScript action:
 - Environment defined in the package.json, as NPM modules
 - Workflow is defined by the JavaScript/TypeScript code

Show time!

References:

https://notiz.dev/blog/build-and-publish-your-first-github-action

https://medium.com/@michaelekpang/creating-a-ci-cd-pipeline-using-github-actions-b6 5bb248edfe

Building GitHub bots

- Apps that runs automation on GitHub
- Uses GitHub WebHooks and APIs
- Enables one to focus on real collaboration

References: https://developer.github.com/v3/activity/events/types/, https://github-bot-tutorial.readthedocs.io/en/latest/

Examples:

https://github.com/TimonVS/epic-generator,
https://github.com/manaswinidas/github-bot-example

"In real open source, you have the right to control your own destiny"

- Linus Torvalds

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