

Rationale on choosing GitHub Actions as an automation tool in the Adams family project

The automation tools that were under review for use as our agile teams preferred choice were, Jenkins, and GitHub action. The consensus in our team meeting on Tuesday 16th November 8:30pm – 8:40pm, was that we would probably be going with GitHub actions over Jenkins. I agreed to further enquire about GitHub actions and Jenkins to further solidify this decision. When researched on the internet it appeared although GitHub actions and Jenkins do similar jobs, GitHub actions is increasingly becoming more popular than Jenkins. Here is a list of reasons why GitHub actions is fast becoming more popular than Jenkins and the rationale for why we chose it as our decided automation tool.

1. Jenkins is designed with the waterfall process in mind. Our team is using the Agile approach which GitHub Actions pipeline is more in tune with.
2. Jenkins is not designed for cloud-based use. Git hub actions is based in the cloud and can be used on a local server.
3. Jenkins's server must be installed. GitHub actions does not require installation
4. Jenkins averages 100 plugins per year. GitHub actions averages 1,000 actions per year
5. Jenkins has more difficulty using GitHub marketplace compared to GitHub actions
6. GitHub actions requires lower maintenance
7. GitHub actions can cover every event type in GitHub.
8. GitHub actions is more flexible in like with agile
9. Dedicated server not Required for GitHub actions
10. Useful GitHub repos for GitHub actions
11. More work testing Jenkins script than GitHub actions script
12. GitHub actions is native to GitHub