Expected Release April 2023

DSO announces the launch of dynamic document driven DevSecOps ecosystem

Sunday, January 29, 2023

New automation tool redefines the possibilities of pipelines by facilitating the passing of data files, allowing the verification of documents to be effortless.

Boca Raton, FL -- (Florida Atlantic University) -- DSO is expected to be launching DocSecOps, an automated document checking tool, in April 2023. This project stems from an in-demand practice known as DevSecOps which stands for **Dev**eloper, **Sec**urity, and **Op**erations. Here security protocols are implemented throughout the software life cycle versus leaving them until the end. This creates an environment where developers are continuously provided insights into code's viability and able to amend any errors. For DocSecOps, we followed a similar structure, but configured a pipeline that will handle the passing of data files. The pipeline will support plain text files, Word documents, PDFs, and PowerPoints.

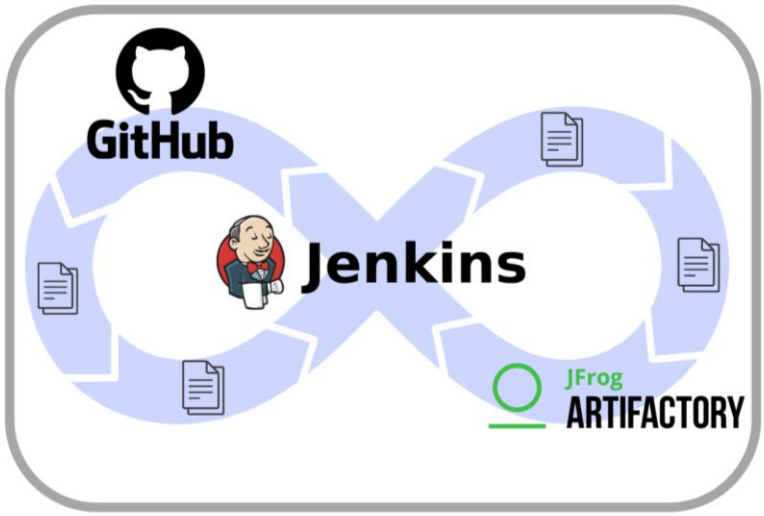

Photo: DOS

This tool allows users to check their documents easily and reliably with little to no effort. Since this is a continuous integration and continuous development pipeline, all the users need to do is simply upload a file, from the allowed data types to a GitHub repository and the pipeline takes over from there. All actions are accomplished behind the scenes requiring limited interaction from the user unless an error occurs. Where, if an issue does arise, the pipeline is configured to send out emails to keep the user informed. Once the file successfully passes through the pipeline it will be stored in an artifact repository to be housed securely. This is this pipeline's first initiative, where future teams will be able to use this environment and develop plugins to create the security aspects of a DevSecOps environment. This can include protocols like checking for misspelled words, broken links, or grammatical errors. This product will benefit those who contain a large array of documentation that needs to be checked to ensure the information within them is accurate.

This pipeline's main users will be the Naval Education and Training Command (NETC), a sector of the Navy focusing on recruitment and training. Since they handle many applications per year, proper documentation is a crucial factor of ensuring that personal who want to join the United States Navy are receiving accurate information. As well as those already in the Navy receiving information that allows them to perform optimally. This pipeline will allow them to accurately distribute information across the entire United States since this environment will seamlessly update and publish their documentation for upper administration.

Key Features:

- Checks the validity of multiple types of documents with limited interaction from the user
- Pipeline will be initiated from idle state once a file is uploaded to a specified GitHub location
- System will notify user of any errors that occur and require attention or if the files were processed successfully
- Seamlessly pushes files through multiple platforms (GitHub, Jenkins, and JFrog Artifactory)
- Uploads files to an artifact repository if the file passes through all required checks
- Integration with Python Scripts as plugins to process the varied data files

DSO

DocSecOps

Meet the team

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We are a team of five senior Computer Science majors at Florida Atlantic University. Our goal is to create a DevSecOps ecosystem for the Naval Education and Training Command (NETC) by developing an automated pipeline that handles the passing of documents.