

# cyTools (cySBOM) App



## **Background:**

The Data Science SBOM (DSsbom) App is a powerful tool that automates the generation of a Software Bill-of-Materials (SBOM), specifically designed for production Data Science projects. With DSsbom, you can easily create comprehensive SBOMs across your production projects, enabling better organization, collaboration, and management of project dependencies across diverse production scenarios. The app caters to a wide range of project types, including data analysis and visualization, statistical modeling and machine learning, applications, package development, reproducible research, reporting, ETL (Extract, Transform, Load), and website development. DSsbom serves as a valuable resource for developers who need to comply with Executive Order 14028. It facilitates the creation of formal records that capture essential details and supply chain relationships of software components utilized in development. By utilizing DSsbom, developers can effectively document and manage the intricate network of components within their software, ensuring compliance with regulatory requirements and enhancing transparency and accountability in the software supply chain.

## **Problem/Cost of Inaction:**

SBOM vendors provide services that are time-sensitive, potentially costly when scaling, and face challenges in validating hash encryptions. By not using SBOMs, organizations expose themselves to increased security risks, compliance challenges, inefficient vulnerability management, impaired incident response, missed business opportunities, and potential legal and financial consequences.

## **Opportunity:**

Currently, no Data Science Software Bill-of-Materials vendor that provides a simple application to generate and manage SBOMs across various production environments.

## **Our Solution:**

Offer an SBOM vendor Software as a Service (SaaS) as an application where a user can generate an SBOM when needed, within seconds, scaled to any project size, and cost a flat fee or a monthly subscription. By enhancing the SBOMs vendor role, we can help customers address cost and vendor challenges, embrace security best practices, and ensure a more secure and resilient software supply chain.

**Product Deliverables and Schedule:** The anticipated completion time of the project is 3 months

**Deliverables:** The following are deliverables from the project by phase:

**Phase 1:** Integration & Design: Integrate existing template into application and design front-end interface. *Minimum Viable Product (MVP) deliverable.* Cost: \$0

**Phase 2:** Testing: Beta testing on the application. *Pre-release deliverable.* Cost: \$250

**Phase 3:** Release: Production release. *Software Release deliverable.* Cost: \$250

## **What do we want others to do?**

Users log in to a dashboard, upload a file, select SBOM type, add an email address, and select generate report. Incorporate SBOMs into development and procurement processes, organizations can enhance their understanding of software components, mitigate risks, and improve overall security posture. Share SBOMs with Stakeholders to promote transparency and enables effective collaboration in assessing and addressing potential vulnerabilities or compliance concerns.

## **Who else cares and why?**

Software developers and engineers care about SBOM vendors because they rely on SBOMs to gain visibility into the software components and dependencies used in their projects. SBOMs provide security teams with insights into potential vulnerabilities and outdated components in the software supply chain. By leveraging SBOM vendors' services, compliance and legal teams can streamline their auditing processes, ensure compliance with licensing obligations, and mitigate legal risks associated with software supply chain management. Executive management and business owners care about SBOM vendors because SBOMs provide insights into the security posture and risk profile of their software assets. Customers and end users of software products care about SBOM vendors indirectly because SBOMs contribute to the security and reliability of the software they use.



**White Paper Available – CyberTools Point of Contact:**