AMOS WS22-23 Project #01 AMOS Firmware Scraper

Project name	Firmware Scraper
Project mission	The mission of this project is to create a software for downloading firmware from different vendors and storing their meta data in a MySQL database. The main functionality will be scheduled searching for firmware, checking for presence in the database, downloading the updated firmware images and storing the metadata in the database. Overall, ensuring that the information in the database is up to date and readily available for further analysis.
Industry partner	Siemens Energy
Team logo	AMOS Firmware Scraper
Project summary	The Firmware Scraper, developed by our team, is an automated tool that retrieves firmware images from various vendor websites and maps their metadata into a MySQL database. The database is enriched with diverse information, including product name, type, version number, download link, and more. This information can be then utilized by EMBA, a firmware analysis tool for penetration testers. EMBA automates the discovery of vulnerabilities within firmware through static and dynamic analysis and produces a comprehensive web report. We are proud to announce that our Firmware Scraper has successfully scraped 5000 firmware images from 18 different vendors, totaling approximately 400 GB of firmware data. This demonstrates the effectiveness and efficiency of our tool in gathering critical information for firmware analysis.

