

ABSTRACT

DESIGN AND DEVELOPMENT PRODUCT SCRAPING SYSTEM IN E-COMMERCE BASED ON WEBSITE USING WATERFALL METHOD

Oleh

Akbar Maulana Yusuf 20102285

The increased use of E-Commerce during the COVID-19 pandemic is evident in the rising online sales data, particularly for everyday essentials such as groceries, medicines, and clothing. The proliferation of E-Commerce websites has provided consumers with a variety of options, allowing them to search for the same products on different platforms and obtain varying results. However, the abundance of E-Commerce websites has also posed challenges. To find products at the lowest prices and highest sales, users must access each E-Commerce site individually, entering the same product keywords—a tedious process for online shoppers. This research aims to design a product scraping system that consolidates information from various E-Commerce sites to facilitate easier product searches for consumers. The application is developed using the waterfall method, and information is gathered through web scraping using the BeautifulSoup library for HTML parsing. Black box testing is employed for evaluation. The development of a product scraping system in E-Commerce based on website using waterfall method has been successfully accomplished. The system underwent functional testing conducted by experts, yielding a testing percentage of 96.55%. It is deemed suitable for publication based on the outcomes of these tests. Functional feature testing, employing black box testing with 38 respondents, resulted in a testing percentage of 96.46%. This indicates that the features and functions of the website-based product scraping system are operating effectively in accordance with the design objectives.

Keywords : BeautifulSoup, E-Commerce, Python, Selenium, Web scraping