ABSTRACT

The utilization of technology in the service industry, especially in cafes, can significantly enhance their service quality. One effective method is to leverage Google Sheets for manipulating and managing cafe accounting data while providing free access to a database. Before adopting Google Sheets technology, the cafe relied on manual accounting by its staff, increasing the risk of errors in daily accounting. To address this challenge, the use of Google Sheets automates the accounting process, reducing the risk of human error. This led to the development of "Cafeasy," a solution utilizing the Google Sheets API and presented as a website. In developing Cafeasy, technologies like NodeJS and ExpressJS were employed following the Scrum methodology. The development process was supported by API testing to ensure that the application's functionality met the desired expectations, with all eight test cases passing, indicating that the backend functionality aligns with expectations. Consequently, Cafeasy offers the desired functionality in its product backlog or for potential users of the application. However, two APIs were not tested because they solely function as redirect pages for Google account logins. Regarding request time, APIs not linked to the Google Sheet API operated in under 600 milliseconds, signifying fast API processes.

Keywords: Nodejs, ExpressJS, Bookkeeping, Google Sheets, Google APIs, Scrum