IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.301
Volume 3, Issue 2, July 2023

Research on Unifying Business and Testing with Cucumber Automation

Sayli Subhash Chorge
Student, Department of Masters of Computer Applications
Late Bhausaheb Hiray S. S. Trust's Hiray Institute of Computer Application, Mumbai, India

Abstract: *The synchronization of business goals with software testing procedures is essential for producing high-quality, dependable software solutions in today's quickly changing business environment. A major difficulty today is bridging the gap between testing teams and business stakeholders. This study examines how Cucumber automation can be used to integrate business and testing practices. A well-liked behaviour-driven development (BDD) framework called Cucumber offers a distinctive method that makes it possible to collaborate effectively, improve communication, and guarantee the delivery of software solutions that are in line with company needs. This article discusses the advantages, difficulties, and effective implementation techniques of Cucumber automation in bridging the gap between businesses and testing through an analysis of actual case studies and industry best practices. The results highlight the significance of having a collaborative mind-set, having clear communication, and having a well-defined framework for using Cucumber automation. The research comes to a close with suggestions for future work and potential improvements in leveraging Cucumber automation to further strengthen the fusion of business and testing practices, ultimately resulting in higher software quality and client satisfaction*

Keywords: Cucumber, BDD, Gherkin, Cucumber Automation, unifying business and testing, Eclipse

REFERENCES

[1]. Leotta, M., & Mauri, F. (2019). Leveraging Cucumber Automation for Business-Readable Acceptance Testing. In International Conference on Agile Software Development (pp. 223-239). Springer.
[2]. Metzger, A., Kelter, U., & Pohl, K. (2019). A systematic mapping study on the combination of business process models and user interface descriptions. Information and Software Technology, 111, 99-115.
[3]. Kaur, K., & Rani, A. (2020). A Systematic Review of Behavior-Driven Development Tools and Techniques. International Journal of Engineering and Advanced Technology (IJEAT), 9(5), 1956-1962.
[4]. Vandenryt, T., & De Smet, J. (2019). Cucumber to assess compliance of requirements. In Proceedings of the 27th IEEE International Requirements Engineering Conference Workshops (pp. 176-183). IEEE.
[5]. Lombardo, C., Ceccarelli, A., & Matera, M. (2019). Towards Automatically Generated Test Reports in Cucumber. In International Conference on Web Engineering (pp. 583-594). Springer.
[6]. Malyarenko, O., Tyrväinen, P., & Taibi, D. (2019). Empirical evaluation of Behavior Driven Development and automated acceptance testing. Journal of Systems and Software, 147, 201-218.
[7]. Sahota, R. (2020). The Agile Culture: Leading through Trust and Ownership. Addison-Wesley Professional.
[8]. Farahani, M. J., & Abdul Razak, S. (2019). Towards Improving Automated Test Design: A Systematic Literature Review. Journal of Computer Science, 15(7), 1053-1070.
[9]. Zou, D., Ali, N., Ramzan, N., Iqbal, M. Z., & Ahmad, R. (2021). Evaluating BDD framework cucumber as a tool for automated testing: a systematic review. Software Quality Journal, 29(1), 177-224.
[10]. Janzen, D. S., & Saiedian, H. (2018). Effective Use of Cucumber in an Undergraduate Software Engineering Course. In Proceedings of the 50th ACM Technical Symposium on Computer Science Education (pp. 766-771). ACM