



# Testing Strategies for Optimal Performance in Ginkgorun Application

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## Abstract

Ginkgorun is a timesheet application built to simplify time tracking and project management across web and mobile platforms. Designed for reliability, it enables users to log hours, manage tasks, and generate reports efficiently. Through comprehensive testing, the app's functionality and stability were optimized to ensure a seamless experience, supporting professional time management needs.

## Introduction

Ginkgorun is a specialized timesheet application developed for internal use within our company, designed to enhance time tracking and project management. The application enables employees to log hours, categorize tasks, and generate reports efficiently on both web and mobile platforms.

As a Software Tester, I played a crucial role in ensuring Ginkgorun's functionality, performance, and reliability through rigorous testing processes. This focus on quality assurance was vital in delivering a seamless user experience, ultimately supporting our team's productivity and workflow.

## Methodology

The testing method for Ginkgorun involved a complete approach to make sure the application was high quality, functional, and performed well across different platforms.

- Test Case Management: I recorded all test cases in Google Sheets, which helped keep track of what was tested, the results, and any problems found. This teamwork made it easy to share and update test cases with the development team.
- Web Application Testing: To test the Ginkgorun web application, I used the development URL: <https://dev-ginkgorun.ginkgosoftware.co.th/>. I tested the application on three browsers: Firefox, Chrome, and Edge. Before starting the tests, I worked with the development team to make sure the latest code was in place, allowing for effective checking of new features and bug fixes.
- Mobile Application Testing: For the Ginkgorun mobile application, I used Android Studio and its simulator to test both the mobile and tablet versions. This method allowed me to thoroughly check how the app works on different device sizes.
- Service Testing: To test the APIs and backend services, I used Postman. This tool allowed me to easily interact with the backend and check if everything was working properly.
- Database Management: For managing the PostgreSQL database for Ginkgorun, I used pgAdmin. This tool helped me run queries, keep track of database performance, and make sure the data was accurate throughout the testing process.

By using these methods, I made sure that Ginkgorun consistently met high standards of quality and usability for our internal users.

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Figure 1: Test Case Management

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## Results

The testing of Ginkgorun confirmed that the application is high-quality, performing well across web browsers and mobile devices. It offers a user-friendly interface for efficient time tracking and task management. All backend services functioned correctly, with the PostgreSQL database maintaining data integrity. Minor bugs were identified and quickly fixed. Overall, Ginkgorun is an effective tool for managing time within the company.

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Figure 3: Workflow of Test Case Management

## Conclusion

The Ginkgorun application effectively meets the company's needs for tracking time and managing tasks. Testing showed that it performs well, is easy to use, and keeps data safe. By quickly fixing minor issues, we ensured a reliable tool for employees. Ginkgorun is a valuable resource for improving productivity in the company.

## Acknowledgements

I would like to thank everyone who supported me during the development and testing of the Ginkgorun application.

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This project has greatly helped me learn and grow in software testing, and I am thankful for the chance to work on it.