## โดรงการ CO-OP SHOWCASE : ก้าวแรกสู่อาชีพ ประจำปี 2567



# I-BIT CWIE DAY 2024



## **Developing A Timesheet Management App With React-Native**



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#### Abstract

The project aims to develop a timesheet management application, GinkgoRun. It is a timesheet management application for Ginkgo Soft employees, focused on time tracking, productivity analysis, and cost management. It simplifies remote work and flexible scheduling. Thus, GinkgoRun provides easy-to-use

View by Year: 2024	=	Dashboard	
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#### interfaces for logging work hours, viewing leave, and tracking holidays.

#### Introduction

As a mobile developer at Ginkgo Soft, I contributed to the development of GinkgoRun, collaborating with a cross-functional team. This timesheet management app was created to provide a mobile platform for employees to log work hours and manage schedules. Furthermore, it supports productivity and flexible work. Using React Native allowed us to deploy across multiple platforms, making the app accessible to Ginkgo Soft's mobile workforce.

#### Methodology

#### 1) Project Setup and Tooling

- Set up the development environment using React Native, Node.js, and Git for version control.
- Used Postman for API testing to ensure smooth integration before backend data fetching.

#### 2) Backend Integration

• Integrated backend APIs to fetch and store timesheet, leave, and holiday data. Collaborated with a backend team member to establish efficient data flow.

#### **3)** Page Development

• Dashboard Page: Created a stacked bar chart to display monthly work and leave statistics.



#### Figure 3: Display Work Days And Leaves When Tapped On Bar Of Stacked Bar Chart



Figure 4: Using Add Function To Add New Timesheet

#### Results

The GinkgoRun project successfully delivered a functional prototype with all main pages: Dashboard, Timesheet, Leave, and Holiday. They are ready to be developed, integrated, and tested. The app demonstrated acceptable performance in tracking employee work hours, managing leave requests, and providing a view of holidays, enhancing operational efficiency for Ginkgo Soft. By allowing employees to log date entries, review tasks, and update their timesheets in real time, GinkgoRun supports reliable time tracking across various projects. The

- Timesheet Page: Developed functionality for viewing, adding, editing, and deleting. Plus, filtering timesheets based on project, task, date, and period.
- Leave Page: Implemented a display for employees' leave records by month and year.
- Holiday Page: Designed a holiday row with monthly views for each selected year.
- 4) Testing and Optimization
- Conducted API testing with Postman and user interface testing to refine the user experience, reduce load times, and ensure smooth functionality across devices.

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team has received positive feedback on the app's usability and potential impact on Ginkgo Soft's project management needs.

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#### Figure 5: Main Pages In GinkgoRun

#### Conclusion

This co-op experience at Ginkgo Soft helped me to expand my mobile development skills, particularly in cross-platform development with React Native. I also gain practical experience in developing an app through teamwork. The collaborative project structure enhances our teamwork and problem-solving



Figure 1: Architecture of Angular Project

GET GET: All Holidays 🖯 Leave GET GET: All Leaves

Figure 2: APIs In POSTMAN

Acknowledgements

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skills. Therefore, it allows us to deliver a user-centered product that effectively meets Ginkgo Soft's needs

for employee time management and productivity tracking.