

UNIVERSITI TEKNOLOGI MALAYSIA

FACULTY OF COMPUTING

INDUSTRIAL TRAINING REPORT

<Business Management System>

By

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4/SECJH

BACHELOR OF COMPUTER SCIENCE (SOFTWARE ENGINEERING)

TRAINING PLACE : CACTION - GOOD WORKS TECHNOLOGY
SDN BHD

TRAINING PERIOD : 14/10/2024 – 28/2/2025

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TUAN AZHAD BIN TUAN RAHIM

REPORT DATE : 22/2/2025

ABSTRACT

This report presents an in-depth overview of my 20-week industrial training experience from 14th October 2024 to 28th February 2025 at Caction. During the internship, I worked under the supervision of Tuan Azhad from the company and Dr. Rozilawati from my university. The internship provided me with a valuable opportunity to apply my academic knowledge to real-world challenges in the business management field, contributing to the company's ongoing project while enhancing my technical, soft, and problem-solving skills. The primary focus of my internship was supporting web and mobile application development and system functionality improvements. My responsibilities included testing and debugging applications, verifying translations, assisting with automated testing by assigning label IDs, and improving manual support documentation. Additionally, I reported bugs, collaborated with team members to resolve issues, and balanced testing tasks with documentation updates. This experience significantly improved my technical proficiency, task prioritization, and communication skills.

ABSTRAK

Laporan ini membentangkan gambaran mendalam mengenai pengalaman latihan industri saya selama 20 minggu dari 14 Oktober 2024 hingga 28 Februari 2025 di Caction. Sepanjang latihan ini, saya bekerja di bawah penyeliaan Tuan Azhad dari syarikat dan Dr. Rozilawati dari universiti saya. Latihan industri ini memberi saya peluang yang berharga untuk menerapkan pengetahuan akademik kepada cabaran dunia sebenar dalam bidang pengurusan perniagaan, serta menyumbang kepada projek syarikat sambil meningkatkan kemahiran teknikal, insaniah, dan penyelesaian masalah saya. Fokus utama latihan industri saya adalah dalam pembangunan web dan aplikasi mudah alih dan penambahbaikan fungsi sistem. Tanggungjawab saya merangkumi pengujian dan penyahpejatan aplikasi, pengesahan terjemahan, membantu ujian automasi dengan menetapkan ID label, dan menambah baik dokumentasi sokongan manual. Selain itu, saya turut melaporkan pepijat, bekerjasama dengan ahli pasukan untuk menyelesaikan isu, serta mengimbangi tugas pengujian dengan kemas kini dokumentasi. Pengalaman ini telah meningkatkan kemahiran teknikal, keutamaan tugas, dan komunikasi saya secara signifikan.

ACKNOWLEDGEMENT

First, I would like to start by thanking my organization supervisor at Caction, Tuan Azhad, job position of the company, Kian Ho, app developer, and Reza, job position. They helped me grow and learn more about working in a real-world environment. They are always willing to help and explain things in detail patiently. I also want to thank my other colleagues, who shared their knowledge and supported me with my internship.

Finally, I would like to thank my faculty supervisor, Dr Rozilawati Binti Dollah, for guiding me on completing my report and logbook during the internship. She also visited my company during the industrial visit to see my company and the working environment. I was glad to have an opportunity to share my experience and the knowledge learned at this company.

TABLE OF CONTENTS

| | TITLE | PAGE |
|------------------|---|-------------|
| | ABSTRACT | ii |
| | ABSTRAK | iii |
| | ACKNOWLEDGEMENT | iv |
| | TABLE OF CONTENTS | v |
| | LIST OF TABLES | vii |
| | LIST OF FIGURES | viii |
| | LIST OF ABBREVIATIONS | ix |
| | LIST OF APPENDICES | x |
| CHAPTER 1 | INTRODUCTION | 1 |
| | 1.1 Introduction | 1 |
| | 1.2 Organization | 1 |
| | 1.2.1 Product and Services | 2 |
| | 1.3 Company Information | 3 |
| | 1.4 Organizational Structure | 3 |
| | 1.5 Division/Unit for Practical Training | 4 |
| | 1.6 Training Program Overview | 5 |
| CHAPTER 2 | SPECIFIC DETAILS ON PROJECT/TRAINING | 6 |
| | 2.1 Introduction | 6 |
| | 2.2 Objectives | 6 |
| | 2.2.1 Training Objectives | 6 |
| | 2.2.2 Project Objectives | 7 |
| | 2.3 Main Internship Task | 7 |
| | 2.3.1 Assigning Label IDs for Automated Testing | 8 |
| | 2.3.2 Testing Translations for Accuracy | 10 |

| | |
|---|-----------|
| 2.3.3 Feature Testing and Bug Reporting | 15 |
| 2.3.4 Updating Manual Support Documentation | 19 |
| 2.3 Tools and Technologies Used | 21 |
| 2.3.1 Hardware | 21 |
| 2.3.2 Software | 21 |
| 2.4 Theoretical and Practical Knowledge Application | 22 |
| 2.5 Challenges Faced during Task Execution | 23 |
| 2.6 Conclusion | 23 |
| CHAPTER 3 OVERALL INFORMATION OF INDUSTRIAL TRAINING | 25 |
| 3.1 Introduction | 25 |
| 3.2 Skills Improvement | 25 |
| 3.2.1 Technical Skill | 26 |
| 3.2.2 Analytical and Problem-Solving Skills | 26 |
| 3.2.3 Adaptability | 27 |
| 3.3 Reference Materials | 27 |
| 3.4 Constructive Comments | 27 |
| 3.5 Conclusion | 28 |
| CHAPTER 4 CONCLUSION | 29 |
| 4.1 Introduction | 29 |
| 4.2 Overall Achievement | 29 |
| 4.3 Problem and Execution | 30 |
| 4.4 Opinion and Suggestions | 30 |
| 4.5 Conclusion | 31 |
| REFERENCES | 32 |

LIST OF TABLES

| TABLE NO. | TITLE | PAGE |
|------------------|-------------------------|-------------|
| Table 2.1 | Hardware Specifications | 21 |
| Table 2.2 | Software Specifications | 22 |

LIST OF FIGURES

| FIGURE NO. | TITLE | PAGE |
|-------------------|---|-------------|
| Figure 1.1 | Organizational Structure for Caction | 4 |
| Figure 2.1 | Assign label IDs in Schedule page | 8 |
| Figure 2.2 | Assign label IDs in Profile page | 9 |
| Figure 2.3 | Assign label IDs in Create Job page | 9 |
| Figure 2.4 | Identify the translation issue found in Duty Roster page | 10 |
| Figure 2.5 | Identify missing translation in Check-Out dialog | 11 |
| Figure 2.6 | Identify overflow reminder in Notification page | 12 |
| Figure 2.7 | Report the translation issue found in Duty Roster in Notion | 13 |
| Figure 2.8 | Report the translation issue found in Check-Out dialog in Notion | 13 |
| Figure 2.9 | Report the issue overflow of reminder in Notion | 14 |
| Figure 2.10 | Test and report the issue found in Marketing Report date range filter | 15 |
| Figure 2.11 | Test and report the issue found in all report default date range at app | 16 |
| Figure 2.12 | Test and report the options bug found in template settings at web | 17 |
| Figure 2.13 | Test and report the version history bug found in template settings | 18 |
| Figure 2.14 | Logs of the manual support guides in Notion | 19 |
| Figure 2.15 | How to Create a Digital Form in the Mobile App Guide | 20 |
| Figure 2.16 | Feedback of How to Create a Digital Form in the Mobile App Guide | 20 |

LIST OF ABBREVIATIONS

| | | |
|-----|---|---------------------------------|
| AD | - | Manufacturing Execution System |
| MAP | - | Mobile Application Architecture |
| SQA | - | Software Quality Assurance |
| IT | - | Information Technology |

LIST OF APPENDICES

| APPENDIX | TITLE | PAGE |
|-----------------|----------------------------------|-------------|
| Appendix A | Industrial Training Achievements | 33 |
| Appendix B | Industrial Training Checklist | 34 |

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter will discuss the introduction of the company. The company name is Caction - Good Works Technology Sdn Bhd, located at Subang Jaya, Selangor. The introduction of the company will include the organization, product and services, and company information. Lastly, the division/unit for practical training and training program overview will also be discussed at the end of this chapter.

1.2 Organization

Caction, formerly known as SalesConnection, is a business management system dedicated to enhancing productivity and building happier, more efficient teams through innovative digital transformation. Caction has successfully supported clients across multiple Asian markets, including Malaysia, South Korea, Hong Kong, Taiwan, Indonesia, and Singapore, helping businesses boost productivity and streamline operations through efficient task optimization and digital service processing. Caction is dedicated to transforming business processes through digital solutions that deliver actionable insights, enabling organizations to operate efficiently while fostering engaged, productive teams.

1.2.1 Product and Services

The company provides several solutions by its product and services.

- a) **Field Service Management System:** Enables efficient scheduling, tracking, and reporting for field teams, ensuring seamless service delivery.
- b) **Outlet & Retail Management:** Streamlines operations for retail locations, including inventory management and sales tracking.
- c) **CRM Customer Management System:** Manages customer data and interactions, improving relationship building and customer satisfaction.
- d) **Operations Management System:** Oversees business operations to improve efficiency and accountability.
- e) **Work Management System:** Organizes tasks, schedules, and workflows, fostering better team collaboration.
- f) **CMMS Maintenance System:** Assists in managing maintenance schedules and asset upkeep to prevent downtime.
- g) **Project Management System:** Offers tools for project planning, tracking, and execution.
- h) **System Integration:** Connects various systems and applications, enabling seamless data flow across platforms.

1.3 Company Information

Caction, founded in 2010 and headquartered in Malaysia, has achieved MSC status as a recognized provider of digital transformation solutions to SMEs and MNCs. Since 2017, Caction has expanded its services to six Asian markets, Malaysia, South Korea, Hong Kong, Taiwan, Indonesia, and Singapore, helping clients save over 1.5 million man-hours by optimizing over 3 million tasks and processing 800,000 service forms. The company's digitalization tools, including workflow automation, intelligence analytics, and marketing chatbots, empower businesses with insights that boost growth, profitability, and productivity. Trusted by notable clients such as Kone, Sunway, Rotiboy, Fujioh, and Hyundai, Caction has helped companies navigate the AI revolution.

1.4 Organizational Structure

The Figure 1.1 below shows the organization structure in Caction. The organization chart represents the hierarchy, led by John Lee as the CEO. Below him, Jay Lim serves as the Project Manager, and Weedon holds the position of Product Manager, overseeing the Backend Developers and Web Developers. Under Jay Lim's guidance, Reza is a System Tester, Tan Kian Ho is an App Developer, and Tuan Azhad bin Tuan Rahim is a Software Developer and Supervisor. As an industrial trainee, the role assigned to me is to assist in automated software testing. I will be under the supervision of Tuan Azhad bin Tuan Rahim, who is my organizational supervisor.

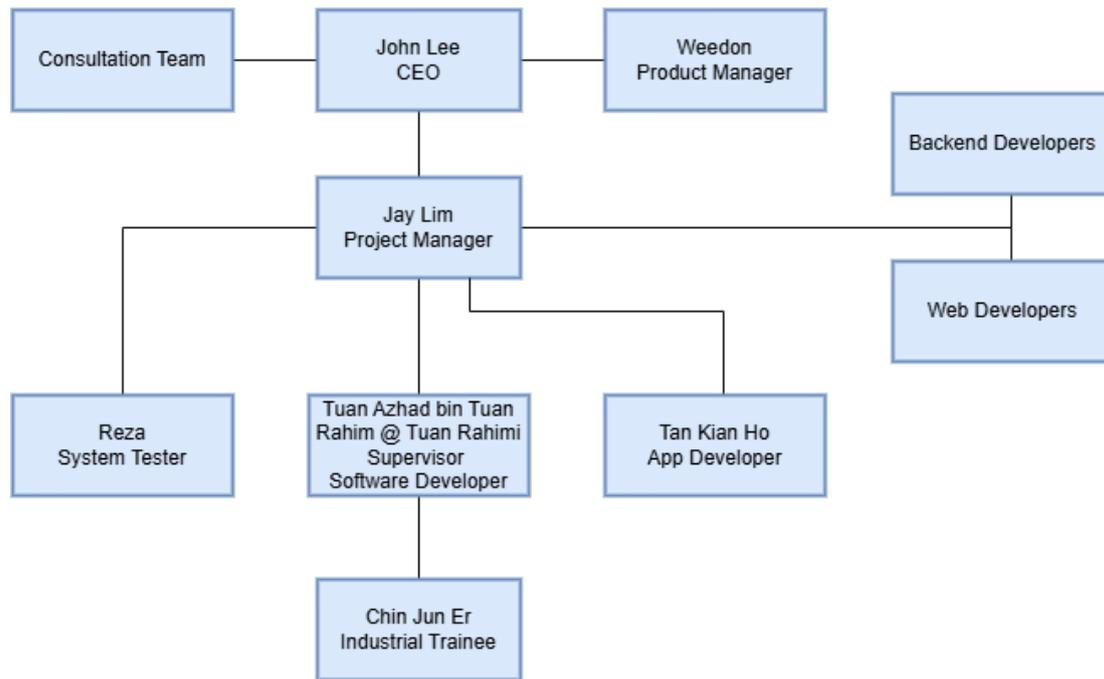


Figure 1.1 Organizational Structure for Caction

1.5 Division/Unit for Practical Training

The industrial training was conducted within the Software Development and Quality Assurance unit at Caction Sdn. Bhd. This unit is responsible for ensuring the functionality, stability, and efficiency of the company’s digital solutions, particularly its mobile and web applications. The team focuses on developing, testing, and maintaining software to enhance user experience and optimize system performance. Within this unit, my role included supporting automated testing, debugging system issues, verifying translations, and improving manual support documentation. The team also ensures that applications are tested thoroughly before deployment, identifying and resolving bugs, UI inconsistencies, and translation errors to improve product quality. By maintaining high software reliability and usability, this unit plays a critical role in supporting Caction.

1.6 Training Program Overview

The training program at Caction Sdn. Bhd. followed a dynamic, task-based structure, focusing on real-world problem-solving and hands-on experience in software development, testing, and documentation. Rather than adhering to a rigid schedule, tasks were assigned progressively based on project needs and development cycles. My responsibilities were primarily centered around web and mobile application testing, debugging, translation verification, automated testing support, and manual support documentation. Throughout the training, I engaged in identifying and resolving software issues, validating system functionalities, improving user documentation, and collaborating with team members to enhance application performance. This approach enhanced my technical expertise, problem-solving abilities, and adaptability to an agile work environment, providing well-rounded exposure to the software development lifecycle while allowing me to contribute effectively to company projects.

CHAPTER 2

SPECIFIC DETAILS ON PROJECT/TRAINING

2.1 Introduction

This chapter will discuss overall internship tasks that have been done within the 20 weeks internship period at Caction. The training given is to support a Business Operation Management System, Caction. The first task was assigning label IDs to mobile app components to facilitate automated testing. Other tasks included testing translations for accuracy, features and reporting bugs. Lastly, another task that has been done was adding and updating manual support documentation.

2.2 Objectives

The objective of this IT internship was to gain practical experience in various aspects of Information Technology by working on live projects. It aimed to enhance technical skills, familiarize with industry practices, and apply theoretical knowledge to real-world scenarios, ultimately preparing for a successful transition into the professional IT workforce.

2.2.1 Training Objectives

The primary objective of this internship was to develop practical skills in software development, testing, and documentation. It provided hands-on experience with manual and automated testing, debugging, and translation verification. Additionally, it enhanced problem-solving abilities by identifying and resolving software issues while improving technical documentation for better user support.

2.2.2 Project Objectives

The project focused on analyzing and applying effective testing, debugging, and automation methodologies to enhance software performance. The goal was to improve system reliability, streamline testing processes, and optimize documentation, ensuring the efficiency of Caction's Business Operation Management System.

2.3 Main Internship Task

Throughout the 20-week internship, various tasks were undertaken to support the Business Operation Management System at Caction Sdn. Bhd. The key responsibilities included assigning label IDs for automated testing, testing translations for accuracy, feature testing and bug reporting, and updating manual support documentation. These tasks contributed to enhancing software reliability, usability, and overall system efficiency. Each task is detailed in the following sections.

2.3.1 Assigning Label IDs for Automated Testing

A crucial part of the internship involved assigning label IDs to mobile application components to facilitate automated testing. This process allowed test scripts to accurately identify and interact with UI elements, ensuring consistent and reliable test execution. By systematically structuring and assigning label IDs, the automation process became more efficient, significantly reducing manual testing efforts and improving software validation. To implement this, I analyzed Flutter code and project files to identify the necessary components requiring label assignments.

After integrating the labels, I used Appium Inspector to verify their recognition and ensure compatibility with automated test scripts. This process was essential in enhancing test coverage, improving efficiency, and strengthening overall software quality assurance, ensuring a more streamlined and reliable testing framework. After completing all assigned tasks, I updated the documentation to clearly define which label ID corresponds to each component or button within a centralized documentation file. This ensured better organization, clarity, and maintainability, making it easier for future developers and testers to reference and implement automated testing efficiently. Figure 2.1, 2.2 and 2.3 show the label IDs were detected in the Appium Inspector.

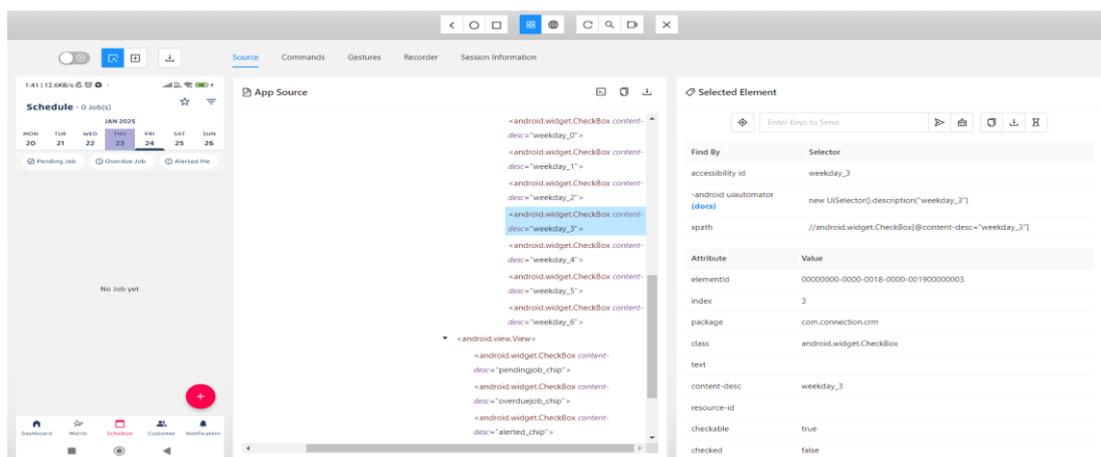


Figure 2.1 Assign label IDs in Schedule page

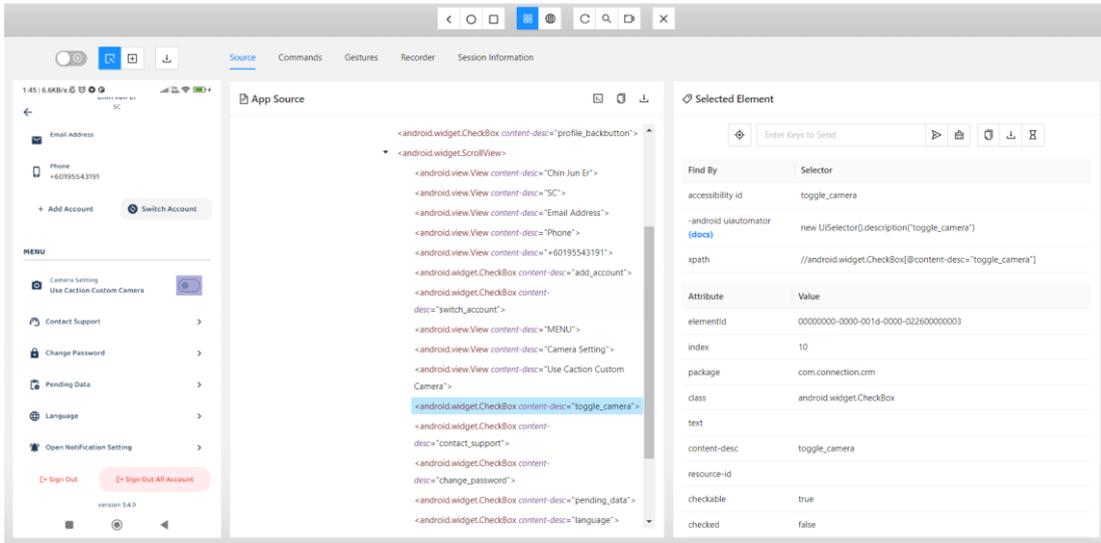


Figure 2.2 Assign label IDs in Profile page

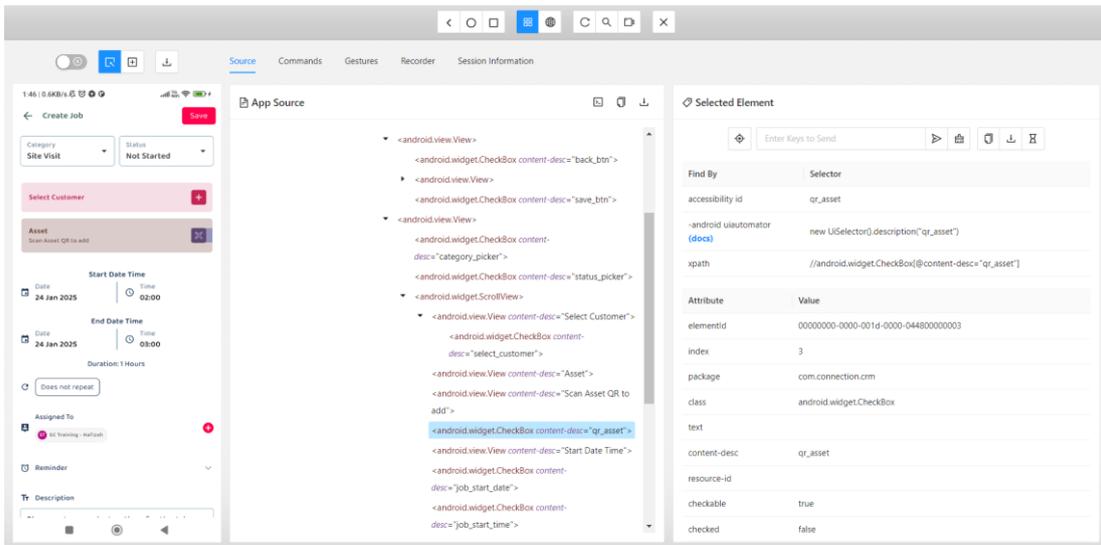


Figure 2.3 Assign label IDs in Create Job page

2.3.2 Testing Translations for Accuracy

Translation testing was conducted to ensure accuracy, consistency, and readability across different system interfaces. This task involved verifying multilingual UI elements and correcting any misinterpretations, missing translations, or formatting errors. The goal was to enhance the user experience for diverse language users while maintaining the system's professionalism and clarity. Figure 2.4 and 2.5 illustrate the translation issues that have been identified.

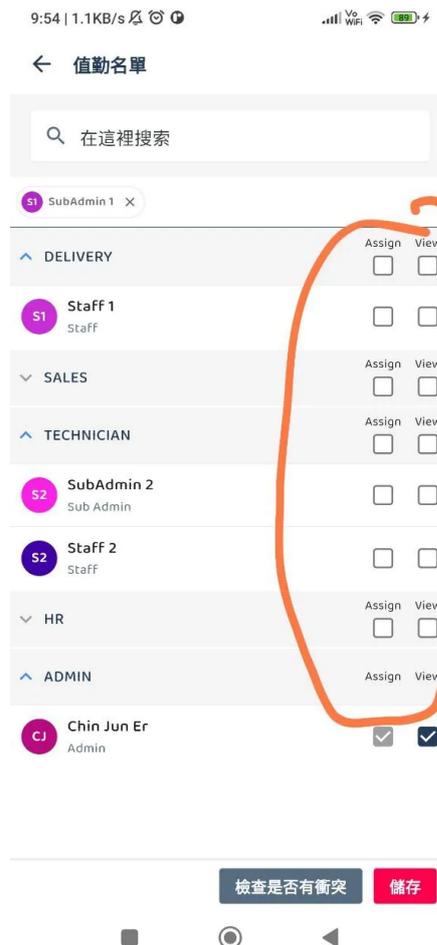


Figure 2.4 Identify the translation issue found in Duty Roster page

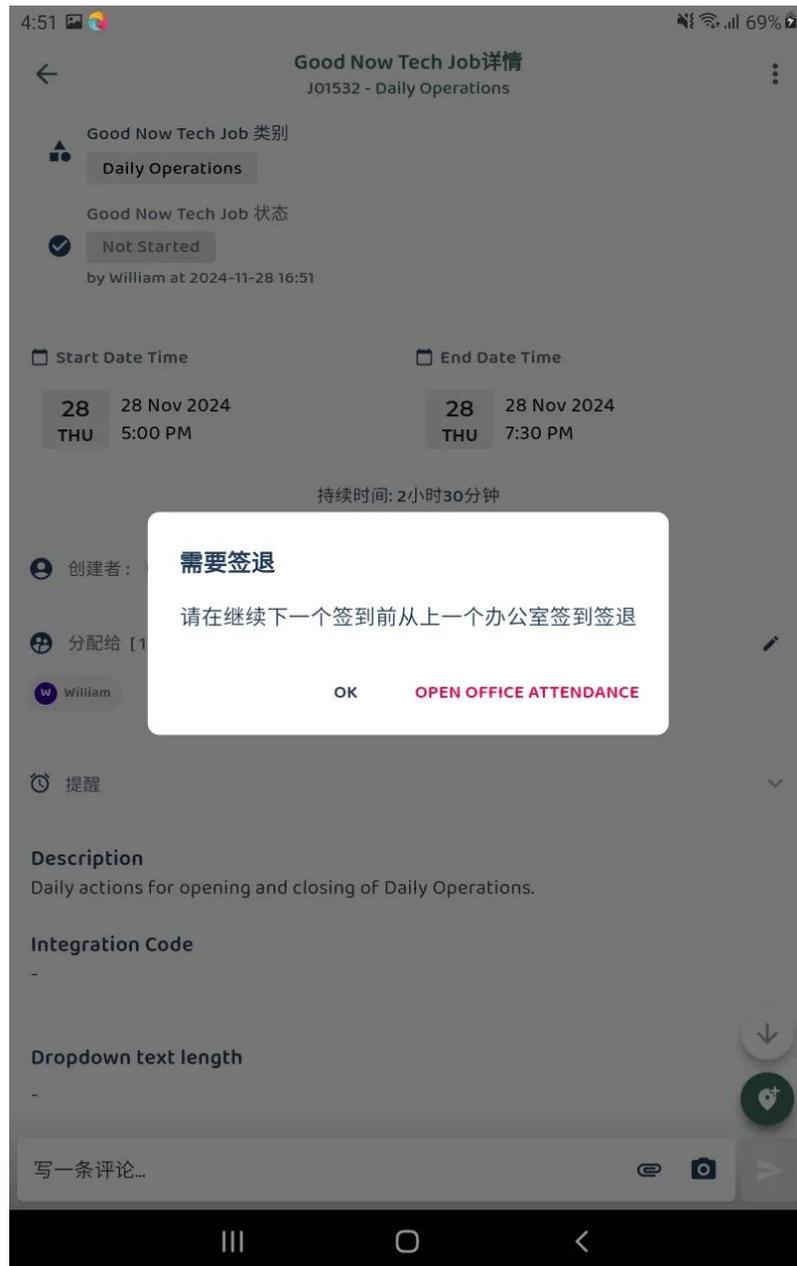


Figure 2.5 Identify missing translation in Check-Out dialog

During the translation testing process, I found a bug in the reminder section on the Notification page. The issue was an overflow of reminders. With the assistance of Sir Kian Ho, I was able to resolve the bug. Figure 2.6 shows the overflow of reminders in the Notification page.



Figure 2.6 Identify overflow reminder in Notification page

To streamline and standardize workflows, Notion, a productivity software, was customized by the Product Manager to facilitate a smooth process flow for requirements gathering, design, development, testing, bug tracking, release notes, and other project management tasks. This customization helped improve team collaboration, documentation efficiency, and overall project organization. During the testing, all the issues found are reported and assigned to their respective parent items. Figure 2.7, and 2.8 show the reported tickets and the parent items in Notion.

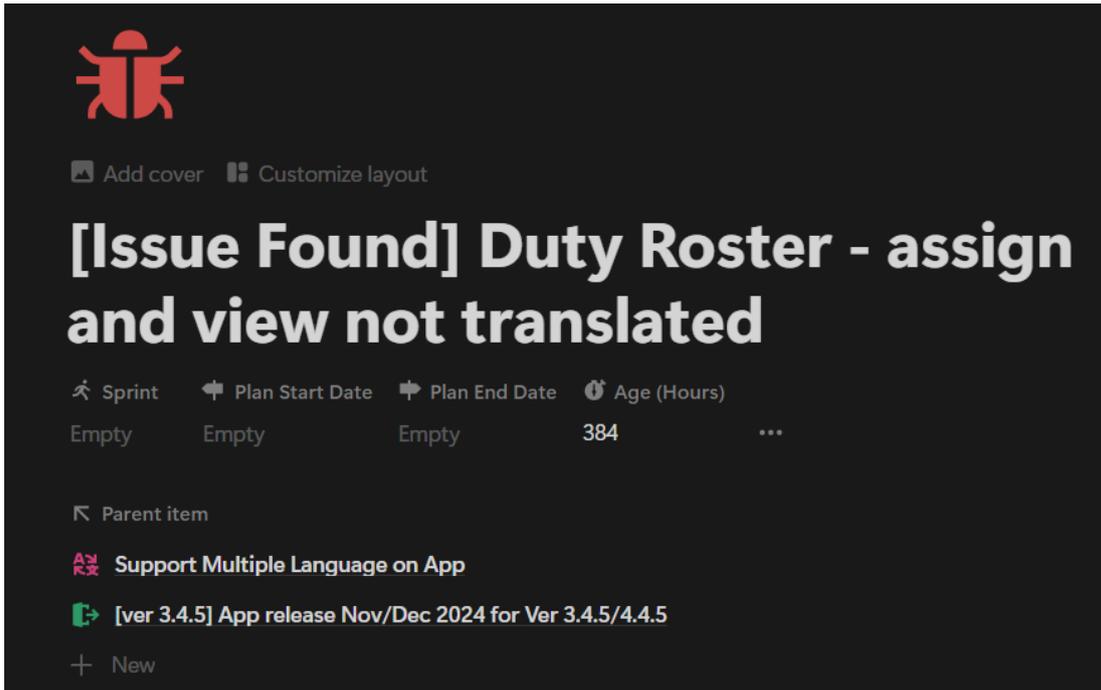


Figure 2.7 Report the translation issue found in Duty Roster in Notion

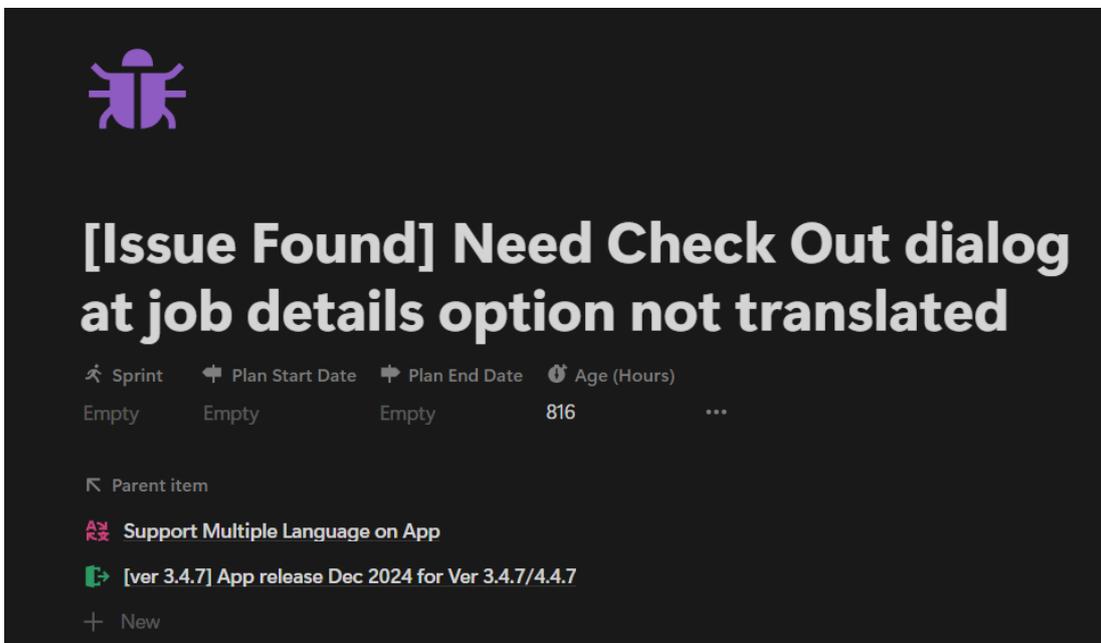


Figure 2.8 Report the translation issue found in Check-Out dialog in Notion

Each ticket contains development details, including the platform, development status, development priority, developer, and tester. Figure 2.9 shows the reported ticket details at the right panel.

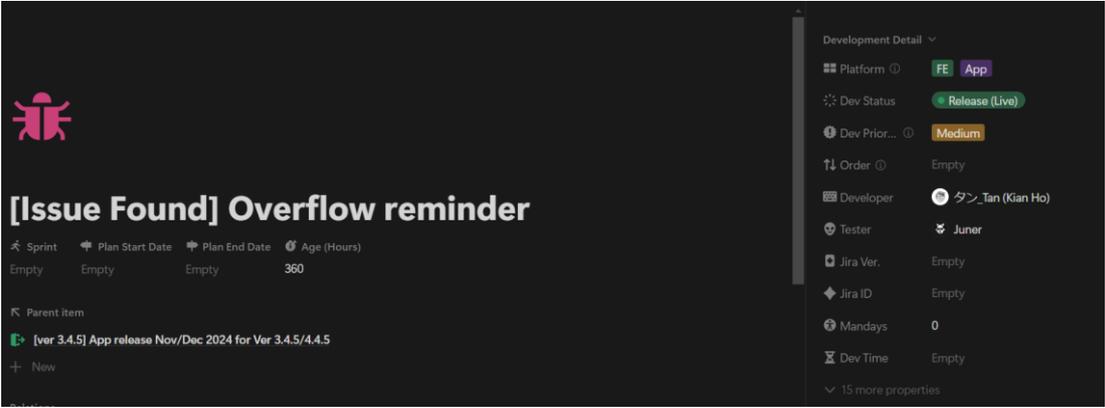


Figure 2.9 Report the issue overflow of reminder in Notion

2.3.3 Feature Testing and Bug Reporting

Feature testing focused on evaluating various functionalities within the web and mobile applications to identify potential issues, inconsistencies, or performance bottlenecks. Bugs were logged, categorized, and reported to the development team for resolution. This process ensured the system's stability and contributed to overall software improvement by refining functionalities before deployment. Figure 2.10 and Figure 2.11 show the bugs tested and reported in different parent items, specifically the web and app, focusing on the Date Range – 'Most Recent' option feature.

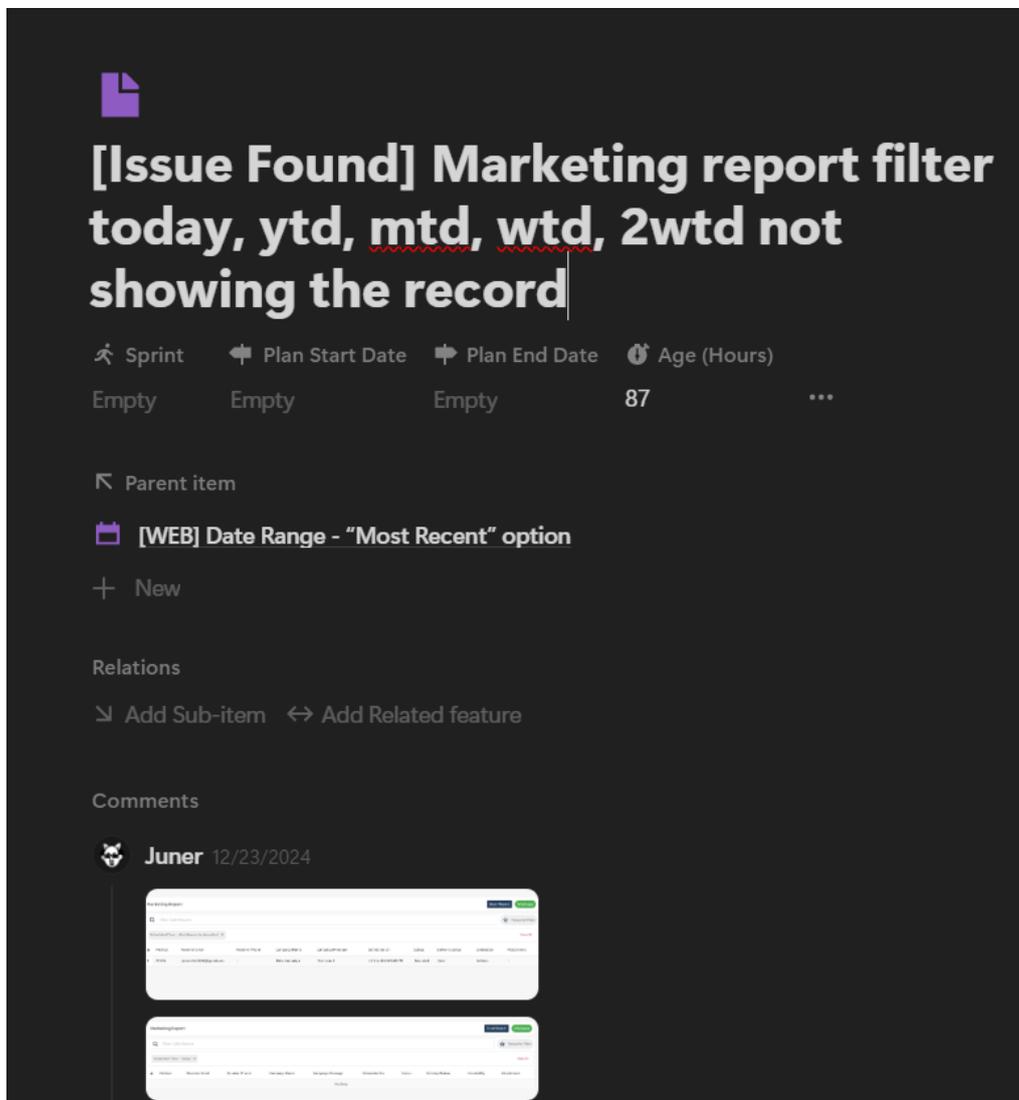


Figure 2.10 Test and report the issue found in Marketing Report date range filter

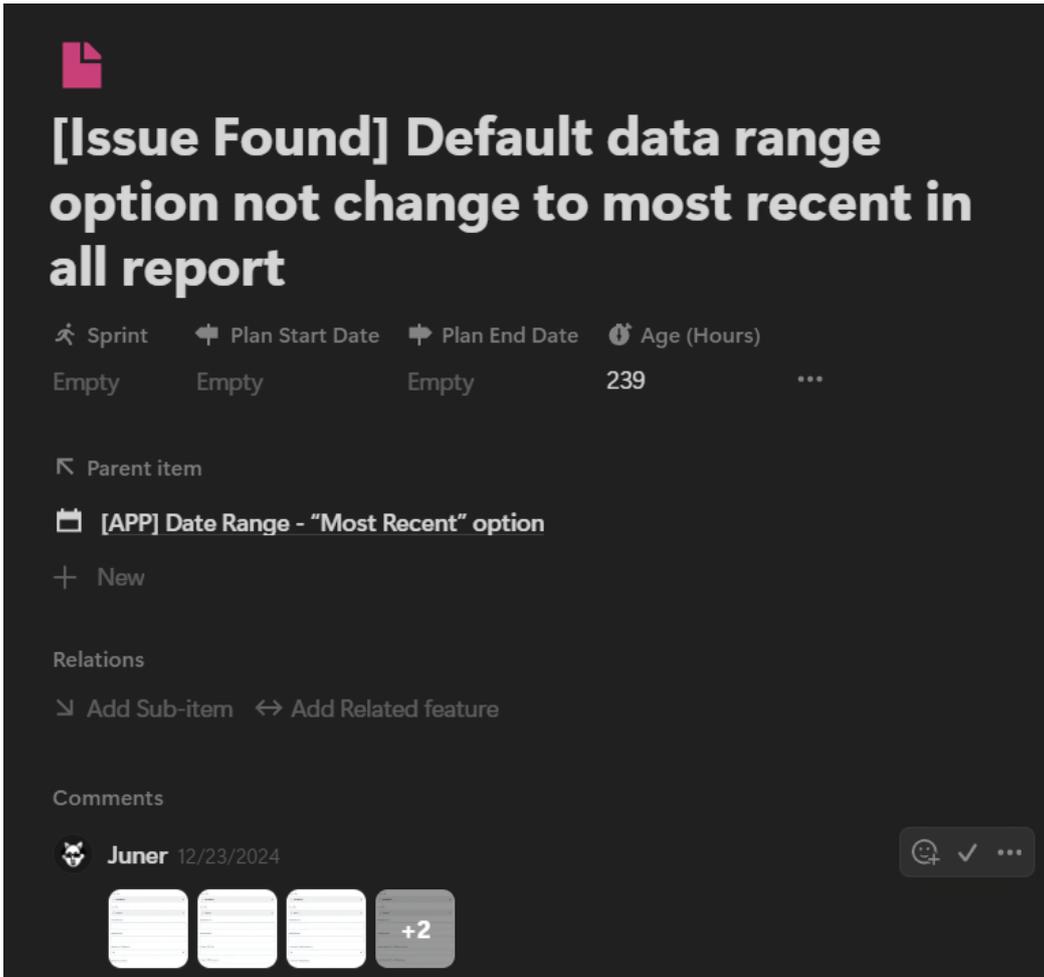


Figure 2.11 Test and report the issue found in all report default date range at app

The bugs occurred in the template settings of the digital form on the web, I found and reported these bugs. After the developers fixed them, I tested and updated the development status to Staging Passed, Prelive Passed, and Release (Live) respectively, which means that the bugs have been fixed and have been released on live. Figure 2.12 and Figure 2.13 illustrate the reported ticket details and bug found in the template settings of the digital form on the web.

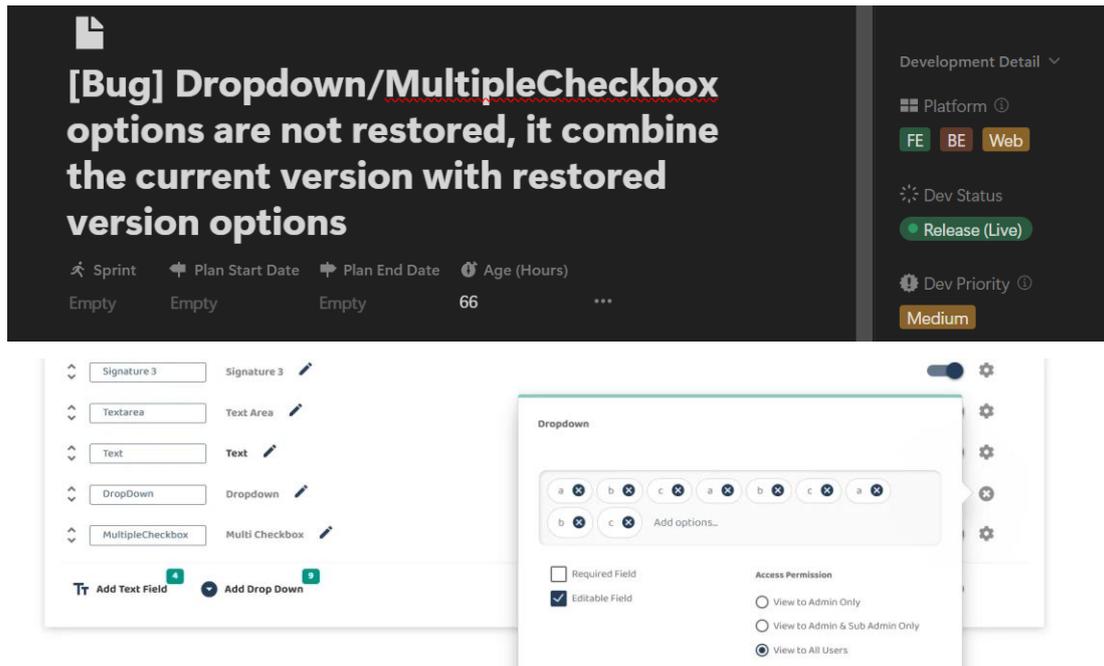


Figure 2.12 Test and report the options bug found in template settings at web



[Issue Found] After restored, save new settings will create default empty notes version history

The screenshot displays the 'Digital Form Template History' interface. On the left, the 'Template Info' section includes fields for 'Template Choices' (Quotation, Sales Order, Service Sheet, Delivery Order, Invoice, Receipt, Template 7), 'Template 7 Category' (General), 'Template Short Code' (T7), 'Template Name' (Template 7), 'Outstanding Label', and 'Collection Label'. Below this is the 'Template 7 Template Configuration' section, which has two expandable areas: 'Details Variable Settings' (containing 1-6 Detail Variable fields) and 'Quick Search Settings'. On the right, a 'Version History' sidebar is pinned, showing a list of versions: '27 Dec 2024, 15:31' (5775 - Test User), '27 Dec 2024, 15:30' (5775 - Test User, First), and '27 Dec 2024, 15:25' (5775 - Test User). The top version is highlighted in blue.

Figure 2.13 Test and report the version history bug found in template settings

2.3.4 Updating Manual Support Documentation

An essential part of the internship was updating and improving manual support documentation for end-users. The documentation included step-by-step guides, troubleshooting instructions, and software usage explanations, helping to streamline onboarding processes, technical support, and user adoption while ensuring clarity and ease of use for system functionalities.

The manual support documentation consisted of numerous Markdown (.md) files stored in a GitHub repository. I was granted access to this repository, allowing me to add, update, and enhance the guides to improve their accuracy and relevance. These tasks were carried out in collaboration with the consultant team to ensure that all updates aligned with user needs and provided clear, actionable guidance. Additionally, the entire task review and feedback process was logged in Notion, facilitating efficient tracking, version control, and seamless communication with the consultant team to maintain up-to-date and useful documentation for users. Figure 2.14 shows the in progress guides and completed guides. Figure 2.15 and Figure 2.16 illustrate one of the example support guides and the feedback from the consultant.

| Aa Name | Status | Priority | Tags |
|---|--------------|----------|---------------------------------------|
| Office Check-In Settings (update screenshots) | In progress | | |
| How to Add Overtime Claim? (update screenshots) | In progress | | |
| I Can Access Digital Form. Why I Can't Create Digital Form ? 18 | Pndg. Review | | Digital form(DF) Access Control UAC |
| How to edit details 4 | Pndg. Review | | Mobile App Desktop Web |
| Report page (update screenshots) 10 | Pndg. Review | | Report Filter Desktop Web Category |
| Add Claim (update screenshots, sentences and typo) | Pndg. Review | | Mobile App HR suite |
| Claim Management (update screenshots, sentences) | Pndg. Review | | HR suite Desktop Web |
| COUNT 7 | | | |
| ▼ Complete 16 | | | |
| Aa Name | Status | Priority | Tags |
| Login (update steps and screenshots) 2 | Approved | | Login Mobile App Desktop Web |
| What is ISO Field? 13 | Approved | | Desktop Web PDF |
| How to Set Customized Favourite Filter as Default - Web (updated screenshots) | Approved | | Mobile App Desktop Web Filter |
| How to Add New Customer? (update screenshots) 1 | Approved | | Mobile App Desktop Web |
| Export Report (update screenshots) | Approved | | Desktop Web Export Report |
| How to Add New Project? (update screenshots) | Approved | | Mobile App Desktop Web |
| How to Add New Job? (update screenshots) | Approved | | Desktop Web Mobile App Job |
| How to Perform Label-to-Label Mapping 17 | Approved | | Desktop Web Data Level Label to Label |
| Creating a Digital Form on Mobile 20 | Approved | | Mobile App Digital form(DF) |
| How to Change Language 13 | Approved | | Mobile App FAQ |

Figure 2.14 Logs of the manual support guides in Notion

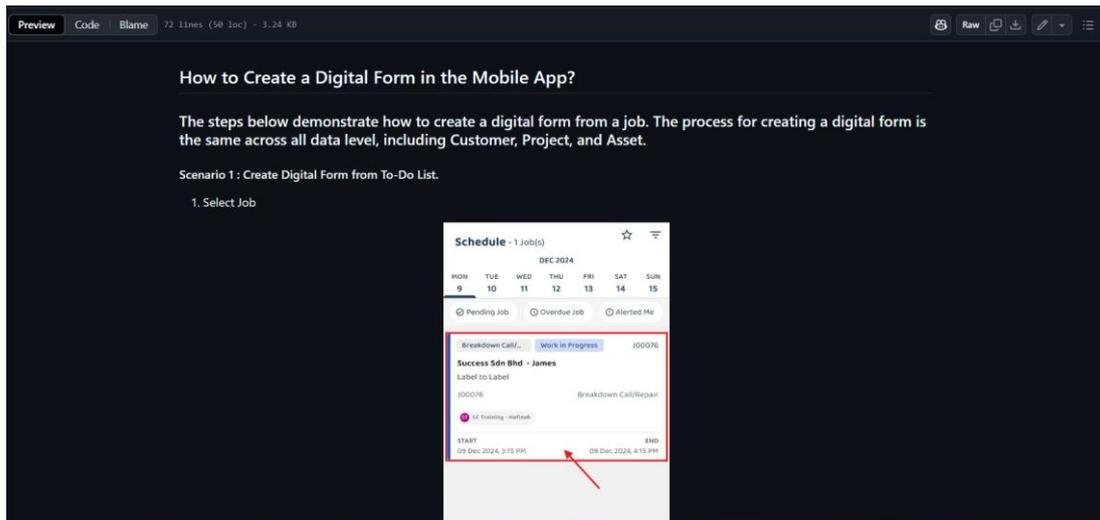


Figure 2.15 How to Create a Digital Form in the Mobile App Guide

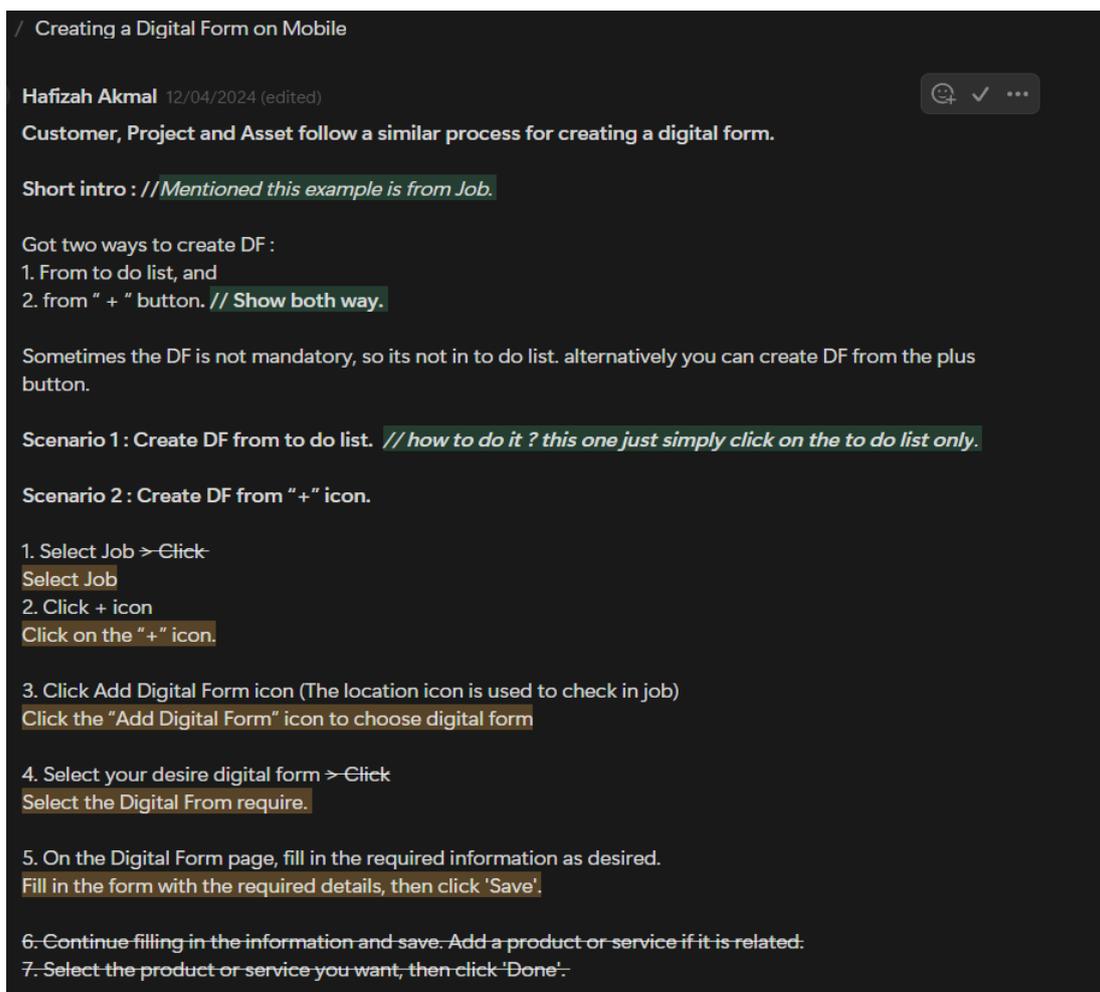


Figure 2.16 Feedback of How to Create a Digital Form in the Mobile App Guide

2.3 Tools and Technologies Used

The completion of tasks throughout the internship depended on the efficient utilization of various hardware and software tools. This section provides an overview of the technologies used, highlighting their specific functions in different projects.

2.3.1 Hardware

The primary hardware utilized during the internship included a laptop and various testing devices. Table 2.1 shows the listing of hardware tools used and its specifications during the whole internship period.

Table 2.1 Hardware Specifications

| Hardware | Specifications |
|-----------------|--|
| Laptop | Processor: AMD Ryzen 7 4800H with Radeon Graphics 2.90 GHz RAM: 16GB Operating System: Window 11 |
| Testing Devices | <ol style="list-style-type: none"><li data-bbox="683 1346 1345 1554">1. Tablet<ul style="list-style-type: none"><li data-bbox="783 1402 1345 1440">● Operating System: Android 13<li data-bbox="783 1458 1345 1496">● RAM: 6GB<li data-bbox="783 1514 1345 1552">● Storage: 128GB <li data-bbox="683 1626 1345 1834">2. Smartphone<ul style="list-style-type: none"><li data-bbox="783 1682 1345 1720">● Operating System: Android 14<li data-bbox="783 1738 1345 1776">● RAM: 8GB<li data-bbox="783 1794 1345 1832">● Storage: 128GB |

2.3.2 Software

The software tools employed during the internship played a crucial role in different phases of application development, such as coding, debugging, version control, and testing. Table 2.2 shows the listing of software tools used and its purposes during the whole internship period.

Table 2.2 Software Specifications

| Software | Purpose |
|--------------------|---|
| Visual Studio Code | Coding, debugging for mobile application using Flutter |
| GitHub | Version control of the manual support |
| Bitbucket | Version control of the mobile application codes |
| Appium Inspector | Inspect mobile app components |
| Notion | Team collaboration, project management, note-taking, knowledge management, and task tracking. |
| Google Chrome | Testing web application |

2.4 Theoretical and Practical Knowledge Application

During the internship, I applied key theoretical concepts and principles from Mobile Application Programming (MAP), Application Development (AD), and Software Quality Assurance (SQA) to real-world tasks. MAP concepts were utilized when working with Flutter code, where I navigated project structures, assigned label IDs to UI components, and ensured their seamless integration with automated testing scripts. AD principles were applied when analyzing the mobile application's system

architecture, understanding how different modules interact, and identifying potential areas for improvement. By debugging the application, I examined logs, traced errors, and modified the necessary Flutter code and configurations to resolve issues, ensuring smooth functionality. SQA knowledge was essential in conducting feature testing, bug reporting, and translation verification, ensuring the application met usability and performance standards. Using Appium Inspector, I validated UI components for automated testing, reinforcing my understanding of test automation frameworks. Additionally, I collaborated with the consultant team, logging tasks in Notion for structured feedback and documentation updates. This hands-on experience helped me bridge the gap between academic knowledge and industry practices, strengthening my technical proficiency, problem-solving skills, and adaptability in a professional environment.

2.5 Challenges Faced during Task Execution

One of the main challenges I encountered during the internship was adapting to both the web and mobile application systems, as it required significant time to fully understand their functionalities, architecture, and workflows. Navigating the mobile application structure, testing frameworks, and documentation processes demanded continuous learning and problem-solving. Additionally, balancing testing tasks and documentation updates was both challenging and rewarding. While ensuring accurate feature testing, bug reporting, and translation verification, I also had to maintain clear, structured, and up-to-date documentation for future reference. Managing these responsibilities simultaneously required strong time management and task prioritization skills, which I progressively improved through hands-on experience, collaboration with the consultant team, and structured feedback tracking via Notion. Overcoming these challenges enhanced my adaptability, multitasking abilities, and overall efficiency in a professional software development and quality assurance environment.

2.6 Conclusion

Throughout the 20-week internship at Caction Sdn. Bhd., I gained valuable hands-on experience in software testing, debugging, translation verification, and documentation management. The tasks I undertook, such as assigning label IDs for automated testing, reporting and resolving bugs, updating manual support documentation, and performing feature testing, allowed me to apply theoretical knowledge from Mobile Application Programming (MAP), Application Development (AD), and Software Quality Assurance (SQA) to real-world projects.

This experience also improved my technical skills, problem-solving abilities, and collaboration in a professional software development environment. Despite initial challenges in adapting to system functionalities, managing multiple responsibilities, and coordinating with the consultant team, I was able to overcome these obstacles through continuous learning, structured feedback, and efficient task management using Notion and GitHub.

By the end of the internship, I had successfully contributed to enhancing system testing efficiency, improving documentation clarity, and ensuring more accurate translation implementation. These efforts not only strengthened my software quality assurance skills but also prepared me for future roles in IT and software development. This internship was a valuable learning opportunity that reinforced my understanding of industry workflows, project coordination, and the importance of precision in software engineering.

CHAPTER 3

OVERALL INFORMATION OF INDUSTRIAL TRAINING

3.1 Introduction

This chapter provides a summary of the industrial training experience, emphasizing skill development, reference materials used, and the constructive feedback received. It outlines the practical knowledge acquired, the resources that facilitated task completion, and the feedback that contributed to professional growth, concluding with reflections on the overall impact of the training.

3.2 Skills Improvement

Throughout the internship, I enhanced several key skills that will be valuable in my future career. These skills were developed through the tasks and challenges I encountered, which contributed to the successful completion of the assigned tasks. The primary areas of improvement include technical skills, analytical and problem-solving skills, and adaptability.

3.2.1 Technical Skill

Working extensively with software testing, debugging, and automation allowed me to strengthen my technical proficiency. Assigning label IDs for automated testing, using Appium Inspector to validate UI components, and debugging issues within Flutter code helped me gain a deeper understanding of mobile application development and automated testing frameworks. Additionally, working with GitHub and Notion provided hands-on experience in version control, documentation management, and collaborative project tracking. The exposure to different software tools and development environments significantly improved my ability to work with testing platforms, debugging processes, and technical documentation updates.

3.2.2 Analytical and Problem-Solving Skills

The internship required me to analyze mobile and web application systems, identify bugs, and propose solutions. Debugging translation errors, feature inconsistencies, and UI issues demanded critical thinking and logical reasoning to trace the root cause and implement fixes effectively. Each bug report required detailed problem analysis and structured documentation to ensure the development team could efficiently resolve the issue. Additionally, I had to assess workflow efficiency in documentation processes, ensuring that manual support guides were well-structured and accessible. These experiences sharpened my ability to evaluate problems, break them down into manageable components, and apply systematic approaches to troubleshooting and optimization.

3.2.3 Adaptability

One of the most significant challenges during the internship was adapting to the system architecture of both web and mobile applications. The initial phase required a steep learning curve to understand project structures, testing procedures, and documentation workflows. Adapting to new tools such as Notion, Appium, and Bitbucket while handling multiple tasks, including testing, documentation updates, and bug tracking, required flexibility and a proactive approach to learning. Furthermore, collaboration with the consultant team and developers helped me adjust to a fast-paced work environment, improving my ability to manage tasks efficiently, prioritize work, and integrate feedback into project improvements.

3.3 Reference Materials

During the internship, I relied on YouTube and TutorialsPoint to enhance my Flutter development, debugging, and automated testing skills. YouTube tutorials provided coding walkthroughs, troubleshooting techniques, and best practices for Flutter and Appium automation, helping me understand widget structures, UI testing, and debugging methods. TutorialsPoint offered structured learning materials on Flutter's framework, state management, and debugging, which were useful for solving technical challenges. These resources helped me adapt quickly, troubleshoot errors efficiently, and improve my understanding of mobile application development and automated testing.

3.4 Constructive Comments

Overall, my internship experience was great. My colleagues and supervisor were always supportive and approachable when I faced any difficulties. They demonstrated, guided me and shared their knowledge, helping me better understand and complete the tasks. The working environment was welcoming and friendly, which made my learning process enjoyable and comfortable. This supportive atmosphere played a key role in my personal and professional growth during the internship.

3.5 Conclusion

The industrial training provided a valuable opportunity to apply theoretical knowledge to real-world scenarios, enhancing my technical skills, problem-solving abilities, and adaptability. Through hands-on tasks in software testing, debugging, and documentation, I gained practical experience in mobile application development, automation testing, and system workflows. The use of reference materials like YouTube tutorials and TutorialsPoint further strengthened my understanding of Flutter and testing frameworks, allowing me to troubleshoot issues efficiently. Additionally, the constructive feedback and guidance from my colleagues and supervisor played a significant role in my learning process. Their support and shared expertise helped me overcome challenges and refine my technical and analytical skills. The welcoming work environment fostered both professional and personal growth, making this internship a highly rewarding experience. This training has prepared me for future roles in IT and software development, equipping me with the skills and confidence needed to navigate complex technical challenges in a professional setting.

CHAPTER 4

CONCLUSION

4.1 Introduction

This chapter provides a summary of the internship experience, focusing on overall achievements, challenges faced, problem-solving strategies, and key takeaways. It also includes opinions and suggestions for future improvements, concluding with reflections on the impact of the training.

4.2 Overall Achievement

Throughout the 20-week industrial training at Caction Sdn. Bhd., I successfully applied theoretical knowledge to real-world tasks, gaining valuable experience in software testing, debugging, translation verification, and documentation management. My contributions included assigning label IDs for automated testing, verifying UI translations, reporting and resolving software bugs, and improving manual support documentation. Additionally, I developed proficiency in using tools like Appium, GitHub, Notion, and Bitbucket, which enhanced my ability to work in a collaborative and structured development environment. This internship significantly strengthened my technical skills, analytical thinking, and adaptability, preparing me for future roles in software development and quality assurance.

4.3 Problem and Execution

During the internship, I encountered several challenges, particularly in adapting to the system architecture, balancing multiple tasks, and troubleshooting software issues. Initially, understanding mobile and web application workflows required time and effort, but with continuous learning and support from colleagues, I gradually improved my efficiency. Managing testing tasks, documentation updates, and bug reporting simultaneously was another challenge, requiring strong time management and task prioritization skills. By leveraging Notion for structured tracking and feedback, I was able to execute tasks more efficiently and ensure smooth collaboration with the consultant team.

4.4 Opinion and Suggestions

This industrial training was a valuable experience that provided hands-on exposure to real-world software development processes. However, to further enhance the effectiveness of the internship program, I suggest incorporating workshops that simulate real industry knowledge tests and mock interviews. These sessions would help students assess their technical skills, improve their problem-solving abilities, and prepare for actual job interviews, giving them a competitive edge when entering the workforce. Additionally, I recommend shifting industrial training to the final semester instead of the second-last semester. By doing so, students can seamlessly transition into full-time employment without the need to return for another semester of studies. This adjustment would allow students to apply their internship experience directly to their careers, reducing the disruption caused by an additional academic term and enhancing job placement opportunities immediately after graduation.

4.5 Conclusion

In conclusion, this industrial training has been a valuable learning experience, allowing me to apply theoretical knowledge to real-world tasks while gaining practical skills in software development, testing, and documentation. The internship helped me develop technical competencies, improve problem-solving abilities, and adapt to a professional work environment. Despite the challenges faced, such as adapting to system functionalities, balancing multiple tasks, and troubleshooting software issues, these experiences strengthened my resilience, critical thinking, and time management skills.

The guidance and support from my supervisor and colleagues played a crucial role in my learning journey, providing valuable insights that enhanced both my technical expertise and workplace adaptability. Additionally, this training has highlighted the importance of teamwork, communication, and continuous learning in a professional setting. The exposure to industry-standard tools and methodologies has equipped me with the skills necessary for a successful transition from academic studies to a professional career. Overall, this internship has been an essential step in my career development, providing me with the confidence and experience needed to excel in the IT and software development industry. The knowledge and skills gained will undoubtedly serve as a strong foundation for my future professional endeavors.

REFERENCES

TutorialsPoint (2006). *Flutter Tutorials*, Available at: <https://www.tutorialspoint.com/flutter/index.htm> (Accessed 16 January 2025).

YouTube (2005). *YouTube*, Available at: <https://www.youtube.com/> (Accessed 16 January 2025).

Appendix A Industrial Training Achievements

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Fax: 07-5565044 Tel: 07-5532008**

INDUSTRIAL TRAINING ACHIEVEMENTS

(This form must be filled by student and must be attached in the Industrial Training report)

Student's Name : Chin Jun Er

Organisation : Caction - Good Works Technology Sdn Bhd

| No. | Task (List all tasks have been completed) | Month of Task Achieved | | | | |
|-----|--|------------------------|---------|---------|---------|---------|
| | | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 |
| 1 | Assigning Label IDs for Automated Testing | | ✓ | | | |
| 2 | Testing Translations for Accuracy | | ✓ | | | |
| 3 | Feature Testing and Bug Reporting | | | ✓ | | |
| 4 | Updating Manual Support Documentation | | | | ✓ | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| Deliverable/Training reflection (Outcomes that have been achieved) |
|---|
| <p>The tasks assigned during the internship not only enhanced my technical skills but also provided valuable real-world experience in a professional environment. I'm able to improve problem-solving, teamwork, and time management skills which are essential in the workplace. Major achievements include enhancing software testing and debugging skills, improving documentation processes, adapting to software tools, and effectively collaborating with others.</p> |

Student Signature: 

Date: 31/1/2025

| Approval | |
|---|--|
| Organisation's Supervisor:  (Signature) | Faculty Supervisor : (Signature) |
| Name: Tuan Azhad bin Tuan Rahim Date: 31/1/2025 | Name: Date: |

Appendix B Industrial Training Checklist

INDUSTRIAL TRAINING CHECKLISTS (PLACEMENT)

| No . | Activities/Tasks | Tick (√) | Endorse by and date |
|---------|--|-------------|------------------------|
| 1. | Report Duty To The Organization Approved by faculty | √ | 14/10/2024 |
| 2. | Perform Report Duty Verification on ITS, verified by organization supervisor. | √ | 17/10/2024 |
| 3. | Contact faculty supervisor to inform the job scope and organization information | √ | 14/10/2024 |
| 4. | <i>Update of Industrial Training site (address). Inform faculty supervisor and JKLI, if any changes.</i> | | |
| 5. | Updating Industrial Training Logbook online – daily basis | √ | Daily |
| 6. | Ensure that the organization supervisor is able to login to ITS successfully (Organization supervisor gets ITS userid and password). | √ | 17/10/2024 |
| 7. | Faculty Supervisor Visit. Date (physical): | √ | 24/1/2024 |
| 8. | Industrial Training Presentation. | √ | 24/1/2024 |
| 9. | Performance evaluation by organisation supervisor in ITS | √ | 24/1/2024 |
| 10. | Submission of Industrial Training Logbook. | √ | 31/1/2024 |
| 11. | Submission of Industrial Training Report with checklist and achievement form as Appendix. | √ | 31/1/2024 |
| 12. | Fill in Industrial Training Performance Evaluation by student in ITS. | √ | 31/1/2024 |
| 13. | End Industrial Training | √ | 28/2/2024 |

Note:

1. *Italic activities are optional depending on student situation.*