UNIVERSITI TEKNOLOGI MALAYSIA

FACULTY OF COMPUTING

INDUSTRIAL TRAINING REPORT

GetMeHired Design and Implementation

By

MOHAMMED RAGAB ELSINOUSI ABDALHADY

2024

BACHELOR OF COMPUTER SCIENCE (SOFTWARE ENGINEERING)

TRAINING PLACE :	MICRO SEMICONDUCTOR SDN BHD, NO 209, INDUSTRY CENTER, TECHNOVATION PARK, UNIVERSITI TEKNOLOGI MALAYISA TRAINING
PERIOD :	25 / 09 / 2023 - 09 / 02 / 2024
SUPERVISORS :	NIK MOHD HABIBULLAH BIN NIK MOHD NIZAM
	HAIRUDIN BIN ABDUL MAJID
REPORT DATE :	01/02/2024

ACKNOWLEDGMENT

First and foremost, I thank Allah for making my paths easy and helpingme overcome all obstacles during my life. Then I thank my father who works day and night for me to study and graduate with the best degree, and I thank mymother who always prays for me and asks about me and checks on my conditionevery day.

I also extend my thanks to my organization supervisor, Mr. Nik Mohd Habibullah Bin Nik Mohd Nizam, who was credited with accepting me in Micro Semiconductor Sdn Bhd and helped me alot to complete my training period. I also thank my university supervisor, Mr. Hairudin Bin Abdul Majid, for being so kind and always following up on my assignments and ensuring that I perform at my best during the training period.

Signature	:	_____
Name of Supervisor I	:	NIK MOHD HABIBULLAH BIN NIK MOHD NIZAM
Date	:	30 JANUARY 2024

Signature	:	_____
Name of Supervisor II	:	HAIRUDIN BIN ABDUL MAJID
Date	:	30 JANUARY 2024

ABSTRACT

This paper presents an industrial training report on software engineering systems and web development for the duration of 20 weeks. The report focuses on the details of developing a website called GetMeHired and belongs to a company called Micro Semiconductor Sdn Bhd that provides software solutions within organisations. The trainee was assigned to the software department under the supervision of Mr. Nik Mohd Habibullah Bin Nik Mohd Nizam and Mr. Hairudin Bin Abdul Majid. The application was developed using Laravel framework and MySQL. The main objective of the project was to create a user-friendly interface and redesign existing ones for clients to access the services. The report also discusses the skills improvement and overall information the industrial training. Finally, it discusses the achievements and challenges faced during the training period as well as suggestion and conclusion.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

As a part of our Bachelor's degree of Computer Science (Software Engineering) inUTM, we must undergo 20 weeks of industrial training in a Software Engineering related company which is equivalent to 12 credits.

This chapter will describe the company profile where the industrial training program take place and also a summary about the company structure and related works.

1.2 Organization Information

Micro Semiconductor Sdn Bhd (MSSB) was established in 2010. MSSB is a Johor based specialized company that focuses on delivering services and supplying sustainable solution through innovation to provide better future in products and services to the customers.

Our services and products range are really broad covering technical, research, and education business in which inclusive assembly, circuit design, consultation, prototyping, security, Internet of Things (IoT), web development, software and hardware development. Our objectives are to generate profit based on innovation and highly-regarded business entity that leads and dominates the market, to provide technology that leads to human satisfaction through high quality product development, and to contribute and improve the wellbeing of the community through business success and corporate responsibility undertakings.

The company logo and contact information are as follows:

Phone: +60 7556 6013

Email: contact.us@microsemi.com.my

Website: www.microsemi.com.my

Address: No 209 Pusat Industri, Technovation Park, UTM, Johor. Malaysia

Figure 1.1 MS Company Logo

1.3 Organization Structure

Micro Semiconductor Sdn Bhd structure in general can be divided into six main groups which are Engineers, Supports, Presales, Sales, Human Resources, Branding and Communication. They all work under the supervision of our CEO Nik Mohd Habibullah Bin Nik Mohd Nizam.

All Engineering and Quality Assurance divisions are managed under the supervisionof the Operational Manager known as the Engineering Team. There is a separate department called the Support Department, which is responsible for system integration, network administration, and other hardware related support tasks. The Pre-sales department is responsible for interacting with the customer throughout the project.

The project development team consists of the project manager, software engineer,pre-sales engineer, developers, and software quality assurance engineer. In the later stagesof the project, the technical writer also joins the team for documentation purposes.

There is also the marketing and advertising department and the human resources team that takes care of the employees' affairs.

In Micro Semiconductor Sdn Bhd, the teams are divided by projects. Each project has a manager under which developers, testers, and quality assurance engineers. The project manager is responsible forthe complete workflow and delivering the final product on time.

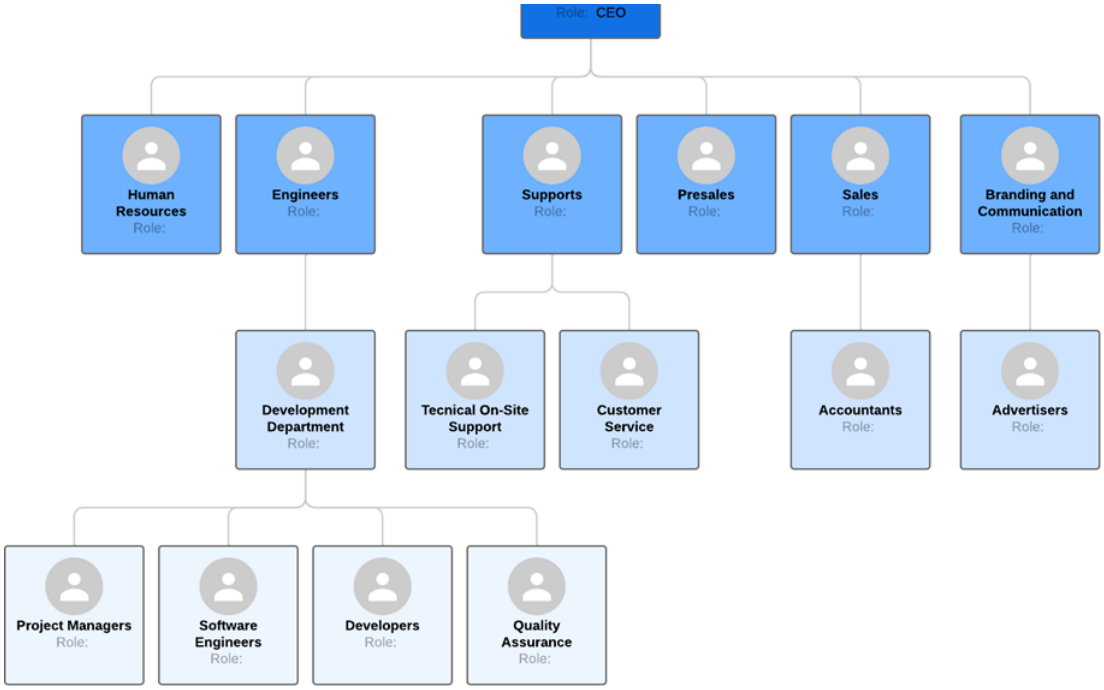


Figure 1.2 Organizational Structure of Micro Semiconductor Sdn Bhd

1.4 Business Solutions

Micro Semiconductor Sdn Bhd company has developed several business Solutions and indispensable systems. Among the most popular of these programs are:

- **Advanced Dialysis Nephrologist Application Network (ADNAN)**

System is an integrated clinical monitoring system for hemodialysis patients and paramedics on their day-to-day activities, inclusive during disaster. This system is research product jointly produced by Universiti Teknologi Malaysia and Chronic Kidney Disease Resource Center (CKDRC) School of Medical Sciences, Universiti Sains Malaysia funded by Ministry of Higher Education which is licenses to Micro Semiconductor Sdn Bhd fot commercialization.

ADNAN System complies with standard operation prosedure for hemodialysis services. The system uses advanced ViTal technology in supporting the operational system activities especially during disaster. ADNAN registered patients will be equipped with indentification NFC technology wristband and medical card. This technology supports ADNAN system and independent to the internet connection, uniquely providing advanced online-offline data synchronization with sophisticated security system and data auto-backup.

Information data access will be readily available for individually registered ADNAN system patients and tracking of these patients will be very easy. ADNAN system also provide the advanced reporting tool, statistical analysis, real-time dashboard. It is tremendously useful for monitoring patient progress and any related intradialytic complications.

- **VITAL**

VITAL is a portable device that does not require any complex configuration at user level. It has been designated at the hardware and middleware level for interfacing with various custom applications. VITAL provides and enabling technologies allowing computation to be performed at the edge of the network, on downstream data on behalf of cloud services and upstream data on behalf of IoT services. VITAL is able to understand for managing data synchronization from edge to cloud for preserving the data integrity.

1.5 Micro Semiconductor Sdn Bhd Mission and Vision

Micro Semiconductor Sdn Bhd strives to "Innovate a Better Future". This vision fuels their mission, which has three pillars:

- Dominating the market through innovation: They aim to be the leading force in their field, generating profit through cutting-edge products and services.
- Enhancing human lives with technology: Their focus is on developing high-quality products that truly improve people's experiences and satisfaction.
- Building a stronger community: Micro Semiconductor recognizes the power of their success and pledges to contribute to the community's well-being through social responsibility initiatives.

1.6 Training Division

The company consists of 6 different division, and I am currently assisting web and software developers in the engineering department, and we often use Laravel Framework in additionto several other languages.

1.7 Conclusion

This chapter introduced this report by talking about general information about Micro Semiconductor Sdn Bhd company where the industrial training took place. It discussed its organization structure, divisions, clients, and the software solutions they provide. The next chapter will discuss the training project and tasks that were done during the training period.

CHAPTER 2

SPECIFIC DETAILS ON PROJECTS/TRAINING

2.1 Introduction

This chapter will briefly cover the tasks and activities that were done during the 20weeks of work as well as the methods that were taken to complete these tasks. In additionto several secondary activities that were carried out at the end of the work period.

2.2 Training Objectives

The main objective of this training is to create the web application applications using programming languages such as: PHP. And by using Laravel framework. Hence, the objective are as follows:

i. Create an intuitive, step-by-step CV creation process with drag-and-drop features and responsive design for seamless user experience.

ii. Develop a secure MySQL database structure with data validation, encryption, and regular backups to protect user information.

iii. Enhance functionality by integrating third-party APIs (e.g., LinkedIn, GitHub) and providing export options (PDF, Word) for user convenience.

2.3 Project Execution

The project execution for the GetMeHired website follows a systematic approach, beginning with the initiation phase where the project's scope, objectives, and team roles are defined. This phase establishes clear communication channels and success criteria. Subsequently, the planning phase involves creating a detailed project plan, allocating resources effectively, and identifying potential risks along with mitigation strategies. The design and development phase then ensue, focusing on creating an intuitive user interface through wireframes and design mockups. The backend infrastructure is developed using Laravel, ensuring secure database connectivity, while frontend functionalities prioritize responsiveness.

Testing plays a crucial role in the subsequent phase, encompassing thorough checks, bug resolution, and validation of compatibility across different browsers and devices. Deployment involves configuring server environments, migrating the website to a production server, and conducting final checks to ensure seamless functionality. The monitoring and optimization phase follows, implementing tools to track website performance, optimizing code, and addressing user feedback for continuous improvement.

An integral part of the project execution is the integration of third-party APIs such as LinkedIn or GitHub, tested rigorously for seamless data import/export features. Simultaneously, the implementation of export options, including PDF, Word, and plain text formats, is executed with a focus on consistent formatting and data integrity. Documentation is paramount, covering comprehensive guidelines for future maintenance, API documentation, and user guides. The final phase involves launching the website with a well-planned strategy, monitoring its performance, and collecting user feedback for ongoing enhancements, ensuring a successful and user-friendly CV maker website.

2.4 Project output

i. User-Friendly Interface

ii. Backend Infrastructure

iii. API Integration and Export Options

iv. Professional Resume Creation

2.4.1 Website Information Pages

The development of the information pages for our website has been a comprehensive process, focusing on the implementation of CRUD operations to ensure effective content management. In the "Create" phase, a user-friendly form was designed, featuring fields for essential information such as title, content, and metadata. Robust validation measures were put in place to maintain data integrity, and successful submissions were stored in the database, accompanied by user feedback to enhance the overall user experience.

For the "Read" functionality, a dedicated page was crafted to list all information pages, incorporating pagination for seamless navigation. Users can easily access relevant details such as titles and summaries, and a click-through option enables viewing of the complete content. The inclusion of a search functionality enhances user accessibility to specific information pages.

In the "Update" phase, an intuitive edit form was designed, pre-populated with existing page data for ease of modification. Validation measures were again implemented to ensure consistency, and upon user submission, the updated information pages were saved to the database. Users are promptly notified of

successful updates through confirmation messages, contributing to a positive user experience.

The "Delete" phase involved the implementation of a confirmation prompt to prevent accidental deletions. Careful consideration was given to data integrity, and upon confirmation, the relevant information page was removed from the database. Success messages were integrated to provide users with clear feedback on the deletion process. Soft deletion and archival features were considered to enhance data management options.

So, I fully designed this page (as shown in Figures 2.1, 2.2, and 2.3)

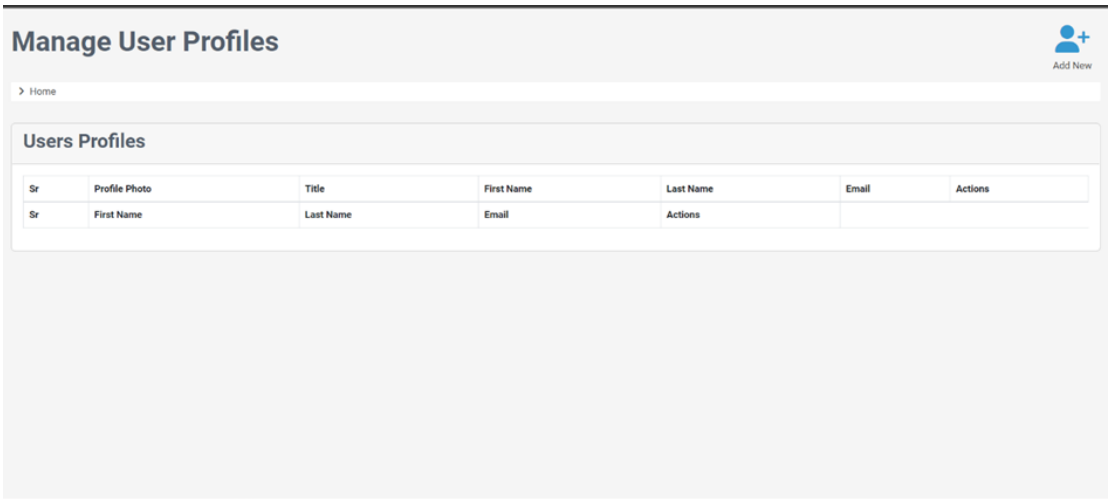


Figure 2.1 Manage User Profile Page

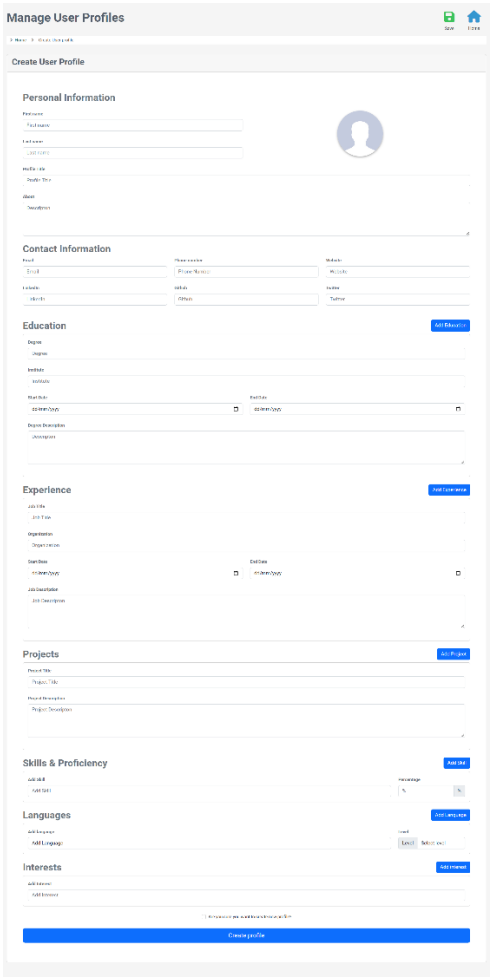


Figure 2.2 Create CV Page

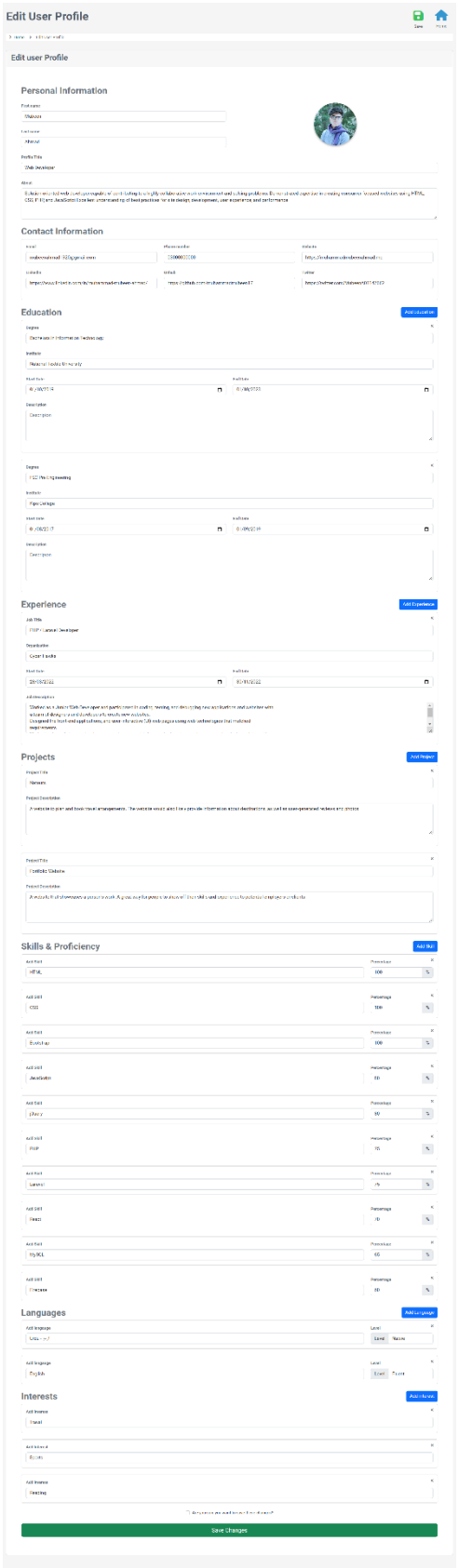


Figure 2.3 Edit CV Page

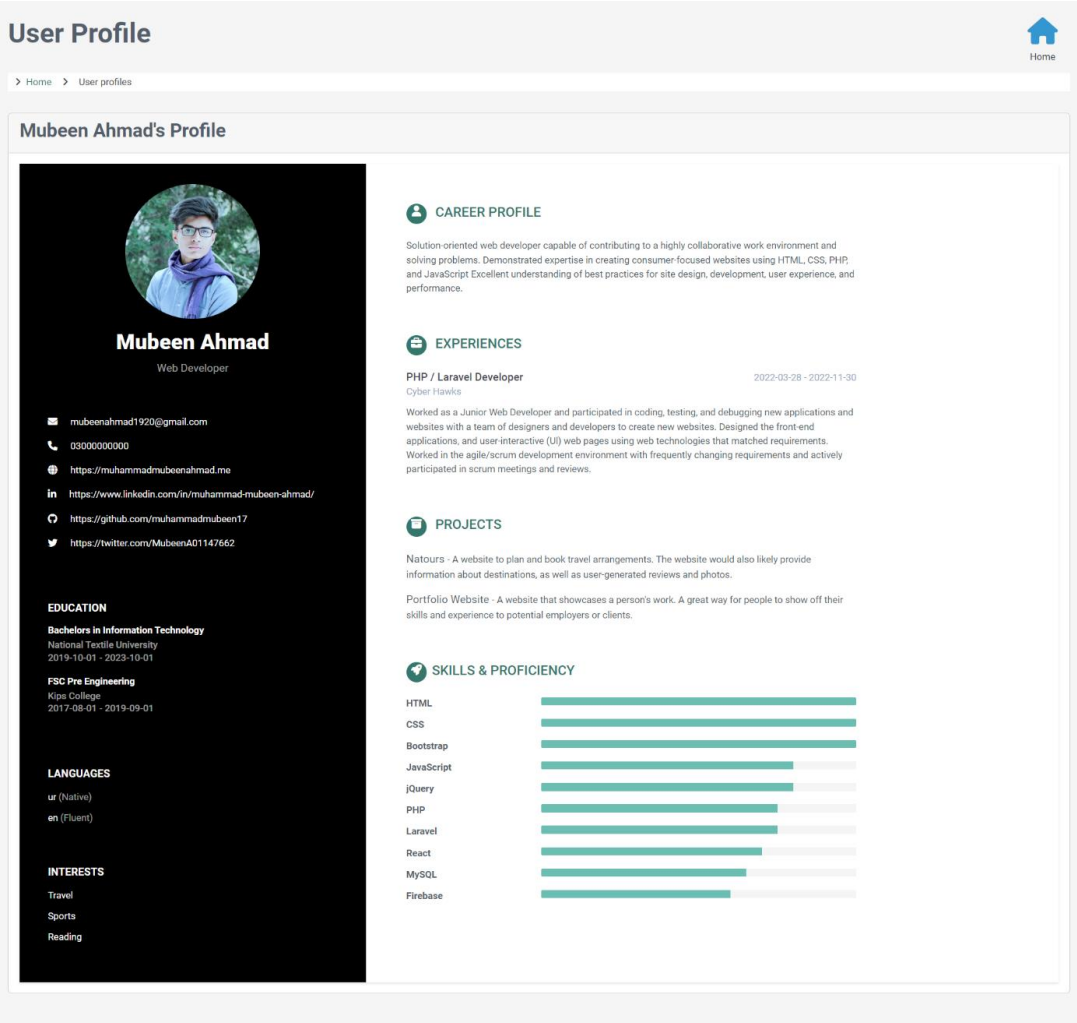


Figure 2.4 Display CV PageTools and Technologies Used

All the Web development were using PHP, jQuery. The IDE used is Visual Studio.

2.5 Time Period to Complete all Tasks

The time taken to complete the front-end development for GetMeHired is approximately 20 weeks, including the design, planning, approvals, implementation, and debugging. Thedetails are as follows:

Table 2.1 Time period to Complete all Tasks

Weeks	Tasks
4-6	Design and planning (3 weeks)
7	Approval from managers and discussing with backend developers (1 week)
8-14	Implementation (7 weeks)
15-17	Testing and debugging (3 weeks)
17-20	Final Refinements and Deployment (3 weeks)

2.6 Side Tasks

While concurrently managing the development of the GetMeHired website, I have been engaged in side tasks related to the creation of a car rental website using WordPress. This parallel project involves leveraging the versatility and user-friendly features of the WordPress platform to design and implement an efficient online platform for car rental services. The development process encompasses various aspects, including user interface design, integration of booking functionalities, and seamless navigation for users to explore available vehicles. Additionally, efforts have been directed towards optimizing the website for search engines and ensuring a responsive design that caters to users accessing the platform across different devices. Continuous monitoring and refinement are integral to this project, allowing for the timely resolution of any emerging issues and the implementation of improvements based on user feedback.

2.7 Problems Faced During the Project Implementation

During the implementation of the GetMeHired website, several challenges were encountered. Designing an intuitive user interface with a range of customizable features posed complexities, as finding the right balance between simplicity and

functionality required iterative adjustments and continuous user testing. Additionally, database management and security presented significant hurdles, necessitating careful attention to prevent potential vulnerabilities such as SQL injection. Robust encryption techniques were implemented to ensure the secure storage of user data.

Despite the challenge, proactive problem-solving, effective communication, and a commitment to continuous improvement contributed to the successful implementation of the GetMeHired website.

2.8 Summary

In this chapter, we discussed the details of the tasks and works that were done during the training period, and this was explained in several screenshots, in addition to clarifying the technologies and programming languages used. In the next chapter we will discuss the personal and practical skills developed during the training period.

CHAPTER 3

OVERALL INFORMATION OF THE INDUSTRIAL TRAINING

3.1 Introduction

This chapter will talk briefly about the problems and difficulties that were encountered during the period of industrial training and the solutions that were learned, inaddition to the personal and practical skills that were developed and the achievements thatwere obtained.

3.2 Skills improvement

My experience during the industrial training period in systems and web development was incredibly rewarding. I had the opportunity to work with a team of experienced professionals who taught me new things that I did not learn in university. I also gained valuable experience that only developed my programming skills, but also the technical and communication skills.

3.2.1 Programming Skills

I did not only learn new programming skills but also developed my past skills. Micro Semiconductor Sdn Bhd allowed me to refine and gain a variety of skills. I developed my skills with usingPHP to create webpages. I also gained experience with popular frameworks such as Laravel, which allowed me to create more complex web applications. Additionally, I learned how to use version control systems such as Git and GitHub for collaborative development. Finally, I learned the principles of

responsive design, which allows websitesto be optimized for different devices. All of these skills have been invaluable in my software engineering career.

3.2.2 Technical Skills

Besides the programming skills I also learned and improved many other technical skills, including but not limited to:

i. JavaScript: I developed my skills with using JavaScript to create interactive webpages and applications. This included learning about variables, functions, objects, loops, events, and more.

ii. jQuery: I developed my skills with using jQuery to simplify the process of writing JavaScript code for webpages and applications.

iii. Responsive Design: I learned how to create websites that are optimized for differentscreen sizes and devices using media queries and other techniques.

iv. Version Control (Git): I developed my skills with using version control systems suchas Git to manage code changes and collaborate with other developers on projects.

v. Web Performance Optimization: I learned how to optimize websites for speed by minifying code, compressing images, caching resources, etc.

3.2.3 Communication Skills

Thie industrial training period in Micro Semiconductor Sdn Bhd also allowed me to gain a variety of communication skills. I learned how to effectively communicate with clients and colleagues, both verbally and in writing. I also learned how to effectively present ideas andsolutions to clients and colleagues. Additionally, I developed the ability to listen carefullyto others' ideas and opinions, and to respond

thoughtfully. Finally, I improved my ability to collaborate with others on projects, which involved understanding the needs of all stakeholders involved. All of these communication skills have been invaluable in helping me become a successful software engineer.

3.2.4 Social and Practical Attributes

UTM taught me many practical and social attributes that I have to apply while performing my work, and Micro Semiconductor Sdn Bhd allowed me to apply what I learned on the reality. The first thing I learned in Micro Semiconductor Sdn Bhd was discipline, as in our company excuses are rarely accepted and we as employees and trainees must come to work on time and perform the tasks assigned tous on time without any delay. Just like UTM taught us when submitting our assignments and projects on time. I also learned to respect other's ideas and constructive criticism, and the correct way to express my opinion to supervisors when I have a new idea or suggestion.Furthermore, I learned to work as a team with my colleagues, just like we used to work during university projects, but this time in a more real and difficult way than before. In general, my social and work skills have developed greatly during this industrial training period which makes me ready and motivated to challenge the odds and continue working in Micro Semiconductor Sdn Bhd or any other work environment.

3.2.5 Relevant Education

It could be difficult to list all the courses that benefited me during my industrial training, as I certainly benefited from all of them in one way or another. As of the beginningof my education I learned the basics of programming and algorithms and then we graduallymoved to more difficult courses. However, I think I can say that the Application Development course had the greatest impact and benefit during my industrial training period, but it is worth noting that during that course we faced some difficulties in applyingthe agile methodology since we applied it directly without direct

rules to follow. Hence, I suggest the addition of a new course related to teaching the Agile methodology to be addedwith to our courses since it is one of the most used methodologies, but it should be combining both practical and theoretical applications. The new course will help us implementing the Agile methodology correctly and will make it easier for us to practice itin different work environments.

3.3 Conclusion

In this chapter, we discussed general information about industrial training and the skills that were acquired during this period, in addition to the challenges that wereovercome and the achievements that were gained. The next chapter.

CHAPTER 4

CONCLUSION

4.1 Introduction

This chapter will conclude this report by talking about challenges that were overcome and the achievements that were gained during the entire training period and willmention some opinions and suggestions as well.

4.2 Overall Achievements

I am proud of the achievements I made during my industrial training period. I wasable to successfully complete several projects that were assigned to me by my supervisors.These projects included modifying and developing a website and mobile application. My work was well received by my company, and they were satisfied with the results.

Moreover, I had the chance to collaborate with other software engineers on variousprojects which allowed me to learn from their experiences and gain valuable insights into the industry. This enabled me to further develop my skillset and become more confident inmy abilities as a software engineer.

4.3 Challenges

One of the biggest challenges I faced during my industrial training period as a software engineer was learning how to work with a team. As a software engineer, I was often required to collaborate with other engineers and developers on projects. This

meant that I had to learn how to communicate effectively, understand the different roles and responsibilities of each team member, and be able to work together in order to complete tasks efficiently.

Another challenge I faced was learning how to troubleshoot and debug software. As a software engineer, it is important to be able to identify and solve problems quickly inorder to maintain the quality of the product. This required me to have an understanding ofthe underlying code and architecture of the system, as well as being able to think logicallyin order to pinpoint any issues that may arise.

Finally, another challenge I faced was learning how to use new technologies. As technology advances, it is important for software engineers to stay up-to-date with the latesttrends and tools in order to remain competitive in their field. This meant that I had to learnhow to use new programming languages, frameworks, libraries, and other tools in order tostay ahead of the curve.

4.4 Opinion and Suggestions

Like most universities, I wish UTM would work and cooperate with other companies to ensure a place for students in the training period, as I struggled a lot at the beginning to find a company, especially since I am not a local student, which makes it a little difficult for us. The university's cooperation with companies will not only make it easier for students, but it will also allow the university for a smooth follow-up during the training period and ensure a good work environment suitable for students' majors.

REFERENCES

Advanced Dialysis Nephrologist Application Network (ADNAN) System | Micro Semiconductor Sdn Bhd. (n.d.). https://www.microsemi.com.my/product/advanced-dialysis-nephrologist-application-network-adnan-system

Accessed, synced and updated. VITAL. (n.d.). https://vital.microsemi.com.my/

Wapples | Micro Semiconductor Sdn Bhd. (n.d.). https://www.microsemi.com.my/product/wapples

APPENDIX A

PROJECT PLANNING GANTT CHART

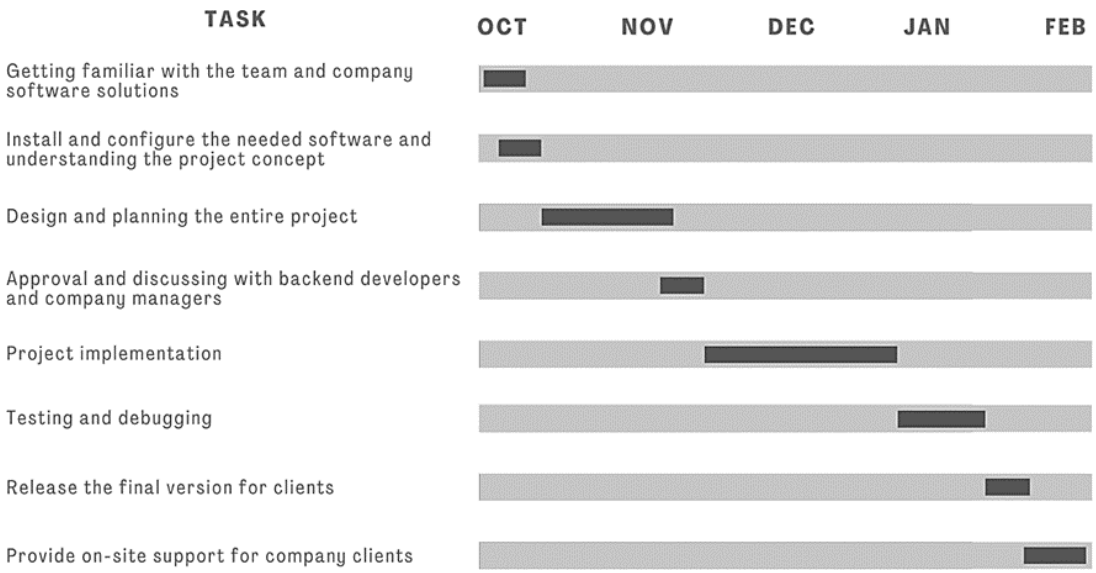


Figure A.1: Project Planning Gantt Chart

APPENDIX B

INDUSTRIAL TRAINING CHECKLISTS (PLACEMENT)

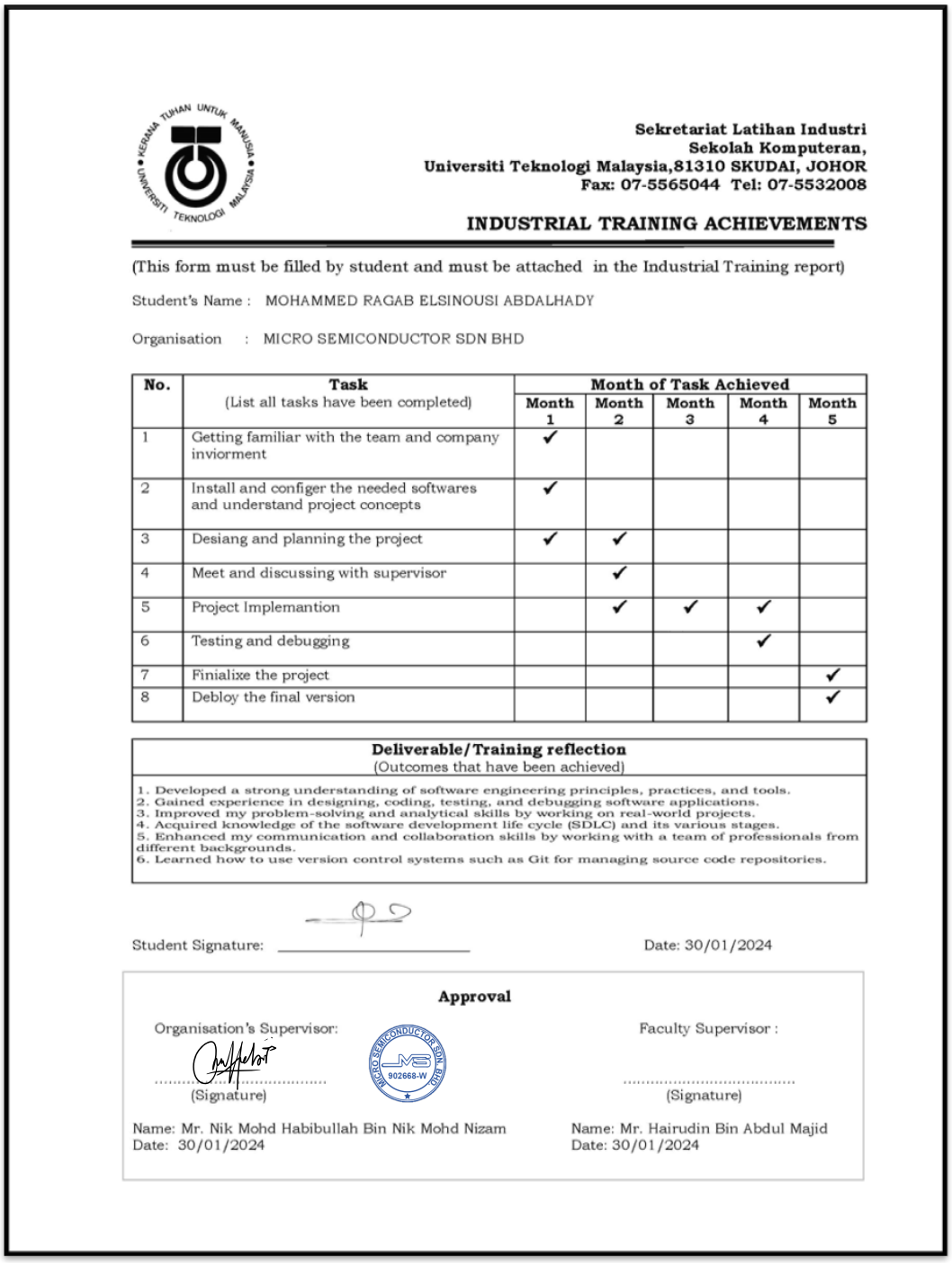
INDUSTRIAL TRAINING CHECKLISTS (PLACEMENT)

No.	Activities/Tasks	Tick (√)	Endorse by and date
1.	Report Duty To The Organization Approved by faculty	✓	22/09/2023
2.	E-mail Report Duty Verification (BLI-1D) to faculty supervisor.	✓	12/10/20234
3.	Upload Report Duty Verification (BLI-1D) in e-learning for course code SECJ4114.	✓	02/02/2024
4.	Contact faculty supervisor to inform the job scope and organization information	✓	24/029/2023
5.	Fill in organization supervisor information survey in ITS	✓	03/02/02/2024
6.	*Update of Industrial Training site (address). Inform faculty supervisor and JKL, if any changes.*	✓	
7.	Updating Industrial Training Logbook online – daily basis	✓	02/02/2024
8.	Ensure that organization supervisor able to login to ITS successfully (Organization supervisor get ITS userid and password).	✓	03/02/2024
9.	Faculty Supervisor Visit. Date:	✓	30/01/2024
10.	Industrial Training Presentation.	✓	30/01/2024
11.	Performance evaluation by organisation supervisor. Online or *submission BLI-2B during supervisor visit.*	✓	03/02/2024
12.	Submission of Industrial Training Logbook.	✓	02/02/2024
13.	Submission of Industrial Training Report with checklist and achievement form as Appendix.	✓	02/02/2024
14.	Fill in Industrial Training Performance Evaluation by student (BLI-1E) in ITS.	✓	03/02/2024
15.	End Industrial Training	✓	09/02/2024

Figure B.1: Industrial Training Checklists

APPENDIX C

INDUSTRIAL TRAINING ACHIEVEMENTS



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Sekolah Komputeran,
Universiti Teknologi Malaysia,81310 SKUDAI, JOHOR
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 : MOHAMMED RAGAB ELSINOUSI ABDALHADY

Organisation : MICRO SEMICONDUCTOR 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	Getting familiar with the team and company inviorment	✓				
2	Install and configer the needed softwares and understand project concepts	✓				
3	Desiang and planning the project	✓	✓			
4	Meet and discussing with supervisor		✓			
5	Project Implemantion		✓	✓	✓	
6	Testing and debugging				✓	
7	Finialixe the project					✓
8	Debloy the final version					✓

Deliverable/Training reflection
(Outcomes that have been achieved)

1. Developed a strong understanding of software engineering principles, practices, and tools.
2. Gained experience in designing, coding, testing, and debugging software applications.
3. Improved my problem-solving and analytical skills by working on real-world projects.
4. Acquired knowledge of the software development life cycle (SDLC) and its various stages.
5. Enhanced my communication and collaboration skills by working with a team of professionals from different backgrounds.
6. Learned how to use version control systems such as Git for managing source code repositories.

Student Signature: _____ Date: 30/01/2024

Approval

Organisation's Supervisor:
.....
(Signature)
Name: Mr. Nik Mohd Habibullah Bin Nik Mohd Nizam
Date: 30/01/2024

Faculty Supervisor :
.....
(Signature)
Name: Mr. Hairudin Bin Abdul Majid
Date: 30/01/2024

Figure C.1: Industrial Training Achievements

Installation

Table of content

1. What is laravel?

Laravel is a web application framework with expressive, elegant syntax. A web framework provides a structure and starting point for creating your application, allowing you to focus on creating something amazing while we sweat the details.

Laravel strives to provide an amazing developer experience while providing powerful features such as thorough dependency injection, an expressive database abstraction layer, queues and scheduled jobs, unit and integration testing, and more.

2. System Requirements

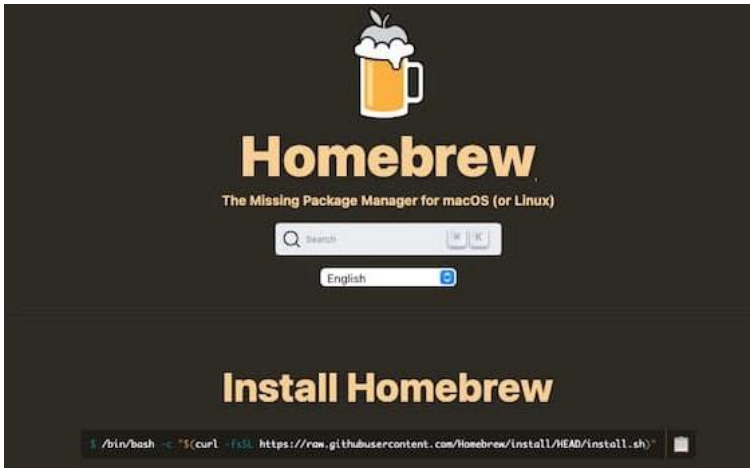
Ensure your system meets the following requirements:

- Supported operating systems: Windows, macOS, Linux
- Hardware requirements: Minimal (dependent on PHP and Composer)
- PHP installation: Required before installing Laravel
- Composer installation: Required for Laravel installation

3. How To Install Laravel on macOS

To install Laravel on macOS, follow these detailed steps:

3.1. Install Homebrew



Homebrew is a package manager for macOS that simplifies the installation of software. To install Homebrew, open the Terminal and run the following command:

```
/bin/bash -c "$(curl -fsSL
https://raw.githubusercontent.com/Homebrew/install/
HEAD/install.sh)"
```

3.2. Install Node.js and npm

Next, install Node.js and npm (Node.js package manager) using Homebrew. In the Terminal, type the following command:

```
brew install node
```

This command installs both Node.js and npm on your system.

3.3. Install PHP

With Homebrew installed, you can now use it to install PHP. Run the following command in the Terminal:

```
brew install php
```

- Wait for the installation to complete.

3.4. Install Composer

A Dependency Manager for PHP

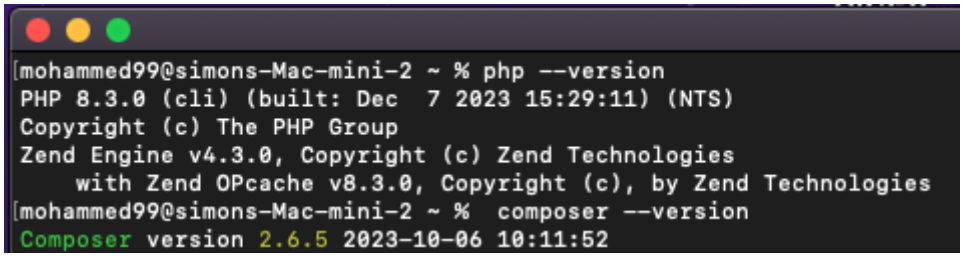
Composer is a dependency management tool for PHP that is required to install Laravel. To install Composer on macOS, run the following commands in the Terminal:

```
curl -sS https://getcomposer.org/installer | php
sudo mv composer.phar /usr/local/bin/composer
```

3.5. Verify PHP and Composer Installations

To verify that PHP and Composer were installed correctly, open the Terminal and run the following commands:

```
php --version composer --version
```



If the installations were successful, you should see the PHP and Composer versions displayed.

3.6. Install Laravel Using Composer

Now that you have Composer installed, you can use it to install Laravel. Open the Terminal and run the following command to install Laravel globally on your system:

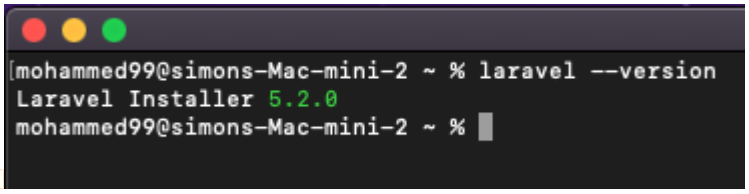
```
composer global require laravel/installer
```

Wait for the installation process to complete.

3.7. Verify Laravel Installation

To verify that Laravel was installed correctly, open the Terminal and run the following command:

```
laravel --version
```



You will know that the installation is successful if you see the version of Laravel displayed.

4. Create a New Project

To create a new Laravel project, use the following command in the Terminal:

```
composer create-project--prefer-dist laravel/laravel app-name
```

Replace app-name with the desired name for your project. This command will create a new directory with the specified name and install the Laravel framework inside it.

Next, navigate to the newly created project directory:

```
cd app-name
```

Remember to replace app-name with the actual name you used for your project.

5. Run The Laravel Server

To start the local development server, execute the following command within the project directory:

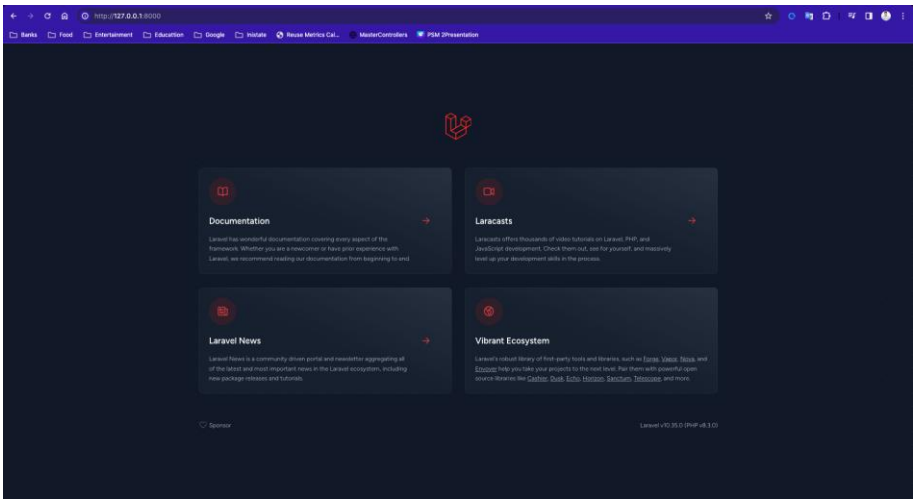
```
php artisan serve
```

```
[mohammed99@simons-Mac-mini-2 Desktop % cd test-app
mohammed99@simons-Mac-mini-2 test-app % php artisan serve

  INFO  Server running on [http://127.0.0.1:8000].

  Press Ctrl+C to stop the server
```

This command will launch a local development server on port 8000. You can access your Laravel application by opening your web browser and navigating to: http://127.0.0.1:8000



You should now see the default Laravel welcome page, indicating that your application is running successfully. You can start building your Laravel application and see the changes live on the local development server.

APPENDIX D

WORKPLACE PICTURES

Figure D.1: Workplace Picture