THE UNIVERSITY OF DODOMA

THE COLLEGE OF INFORMATICS AND VIRTUAL EDUCATION

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING(CSE)

INDUSTRIAL TRAINING REPORT

At the Department of IT at UBX Company Ltd.

Kinondoni, Dar es salaam.

By

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Course Code:
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Submitted to: Ms. Chenge

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TABLE OF CONTENTS

Contents

LIST OF ABREVIATION

ASD – Application and Software Development

BCX – Business Connexion

BOA - Bank of Africa

DCB - Dar es Salaam Commercial Bank

ICT – Information and Communication Technology

IPT - Industrial Practical Training

ITT - Intrinsic Technology Tanzania

PBZ - Peoples Bank of Zanzibar

TPB - Tanzania Postal Bank

UAT – User Acceptance Testing

USC - UmojaSwitch Company

LIST OF FIGURES

ACKNOWLEGEMENT

I would like to thanks to GOD, for keeping me healthy till this time. I have nothing to say to you more than saying thanks very much.

I would like to express my appreciation to the management of UBX Company Ltd for their willing to provide a chance and allowing me to conduct my IPT program at their Company

I would like to appreciate the UBX Company Ltd staffs and all others who shared their thoughts and technical support with me on this IPT program.

I would like to thanks cooperation which I received from my IPT supervisor **Miss Chenge** from University of Dodoma, her advice and knowledge that she gives me has been successful to me.

I would like to thanks cooperation which I received from my fellow students, Gloria,Naseem,Sophia and David, on a project within our field of study.

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Last but certainly not least, I would like to extend my deepest appreciation to Mr. Costantine, who served as my mentor throughout the development of the UBX-Catering-Soft-System during the course of my practical training. His sagacious counsel and unwavering encouragement greatly enhanced my coding skills and learning.

In closing, I extend my heartfelt thanks to all who played a pivotal role in ensuring the success of my Industrial Practical Training. Your collective support and guidance have been truly invaluable.

SUMMARY

This is an Industrial Practical Training report conducted at UBX Tanzania Ltd at department of ASD. My Industrial Practical Training commenced on 31st August,2023 and ended at 22nd September,2023.

During my Industrial Practical Training at UBX, I engaged in the following activities;

Developing USSD Using Spring Boot FrameWork.

Explored and mastered Spring Boot features such as Spring Security, JPA, and Thymeleaf

Designed and implemented the UBX-Catering-Soft-System, For food ordering system developed using the Laravel framework.

Acquired skills in utilizing GitHub, including pushing, pulling, and collaborating on a shared project.

Learning and Received hands-on experience in deploying systems on a live server using Linux CentOS. This involved the installation and configuration of separate components, including Apache, MySQL, Node.js, and Composer

Practicing software development where by it involved preparation of User Requirements Document, System requirement specifications, System Design Document, Implementation of the Development of the Software name UBX-Catering-Soft-System, quality assurance, penetration test, UAT preparation and finally deployment of the software by which it was deployed at UBX Server

CHAPTER ONE

INTRODUCTION

1.0 Historical background of UBX Tanzania Ltd

UBX was originally registered as Intrinsic Technology Tanzania Ltd (ITT). In 2004, ITT was acquired by Business Connexion (Pty) Ltd of South Africa and changed its name to Business Connexion Tanzania (BCX). UmojaSwitch (USC) acquired BCX majority shareholding in 2021 and changed the name of the Company to UBX.

65% of UBX's stake is owned by UmojaSwitch Company Limited (USC), a company whose ultimate majority ownership is by commercial banks namely:

- Peoples Bank of Zanzibar (PBZ).
- Tanzania Postal Bank (TPB).
- Azania Bank Ltd.
- Dar es Salaam Commercial Bank (DCB).
- Tanzania Investment Bank.
- Mkombozi Commercial Bank.
- Uchumi Commercial Bank.
- Letshego Bank, and
- Bank of Africa (BOA) Bank.

35% stake is owned by Tanzanian individuals. UBX Tanzania operate across various sectors countrywide, delivering ICT services and related products. The driving force behind our service provision is our "partnership" rather than being just a vendor to our customers.

1.1 Task performed and knowledge atained

Task and knowledge obtained during my IPT classified according to sections of UBX Tanzania Ltd were, Designed and implemented the UBX-Catering-Soft-System For food ordering system developed using the Laravel framework, Acquired skills in utilizing GitHub, including pushing, pulling, and collaborating on a shared project,Deploying System On real sever Using Linux Cent Os, preparation of user requirements document, preparation of system design document, preparation of a project plan preparation of UAT. According to the project plan prepared my tasks were: On user requirement document I prepared Use cases and on system design document I prepared the Module Descriptions, On Implementation Phase which was the main purpose of the IPT I dealt with Authentication and User Management Component

where by implemented the logics and functionalities of authentication in the system and the logics and functionalities to handle users of the system and the last part is Admin Dashboard component Whereby I designed the UI which supported the functionalities and logics of user management and authentication, and finally in deployment we deployed the system on UBX servers and the system is being used till now

1.2 Organization structure

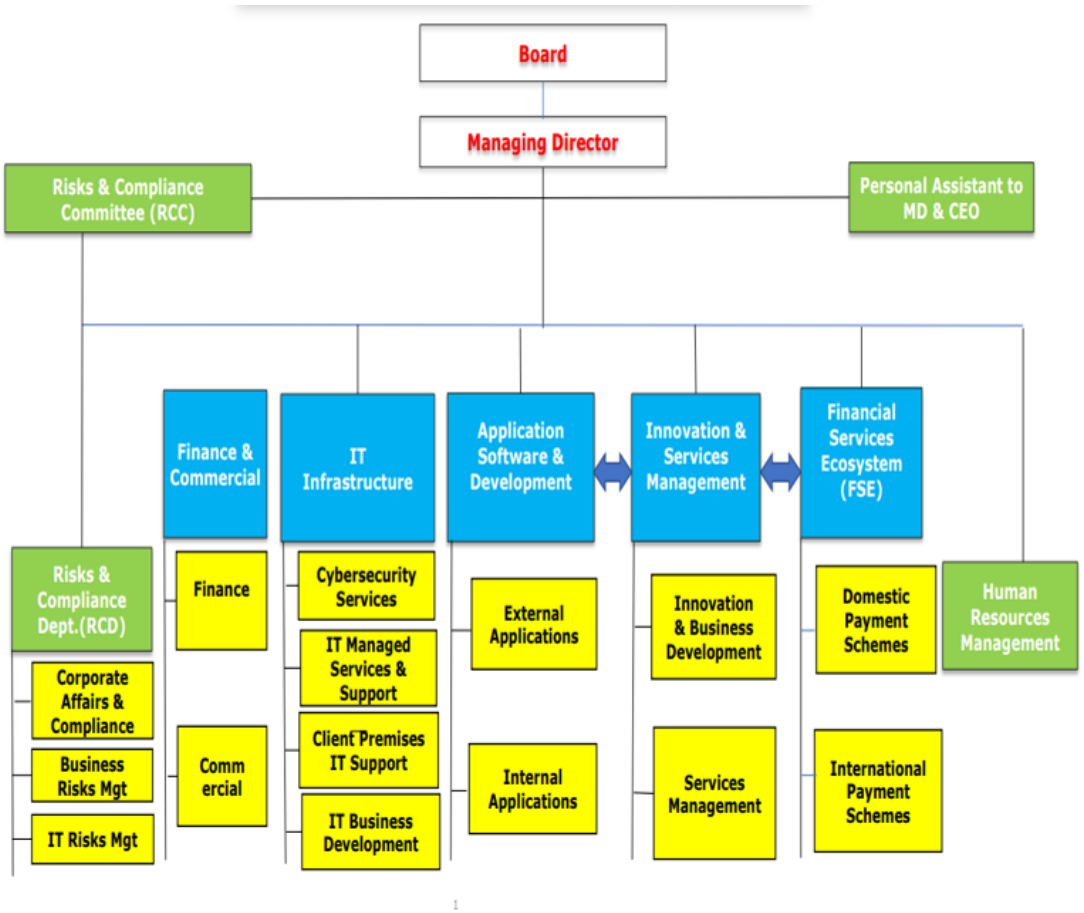

Figure 1:UBX-Organizational structure

CHAPTER TWO

TASK PERFORMED AND SKILLS DEVELOPEDED AT UBX

2.1 Customer Welcome Page

Welcome Page This serves as the initial page that appears when a customer opens the link for the first time. It includes a guide to help users understand the system's functionality easily. Additionally, it displays information about the items available on the given day, indicating whether food will be accessible on that particular day.

This particular page facilitates the display of 'Contact Us' and 'About Us' information. Additionally, customers can directly communicate with customer care through Instagram and mobile phone channels. It streamlines the process for customers to read our system guidelines and also enables them to view menu prices before entering the system and placing food orders

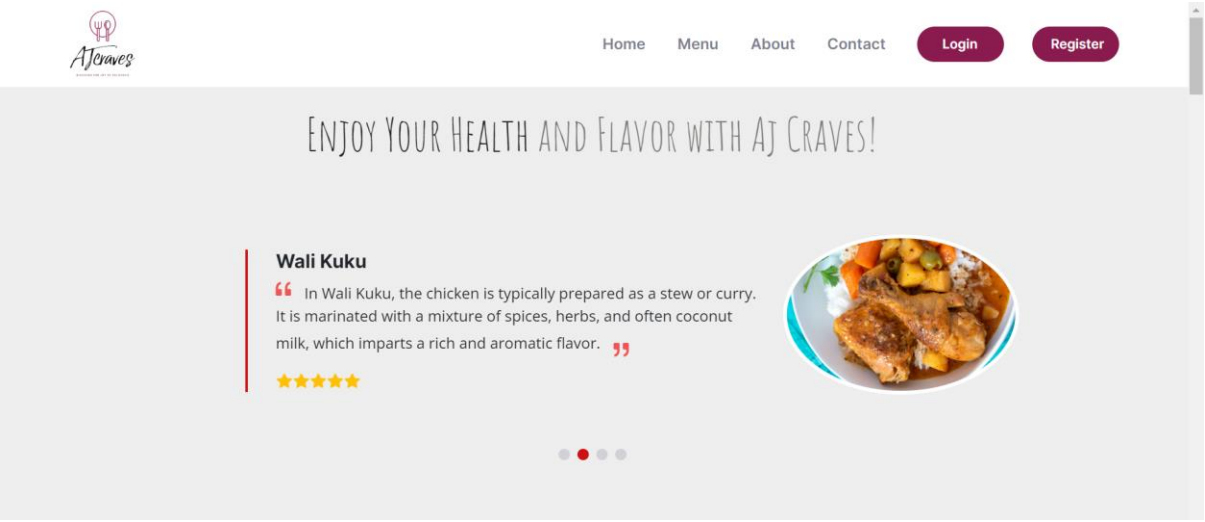

Figure 2:Welcome page

the today's menu displays the prices and the available dishes for the day before the customer enters the system. This helps the customer to know in advance whether they can afford to purchase today's meal. If feasible, they can proceed to enter and start placing their order.

This proactive approach empowers customers to make informed decisions about their meal choices, providing a clear understanding of the available options and associated costs. By offering a sneak peek into the day's menu, we enhance the customer experience, enabling them to assess affordability and make selections that align with their preferences. This user-friendly approach not only streamlines the ordering process but also establishes transparency and convenience, encouraging customers to seamlessly enter the system and initiate their orders with confidence

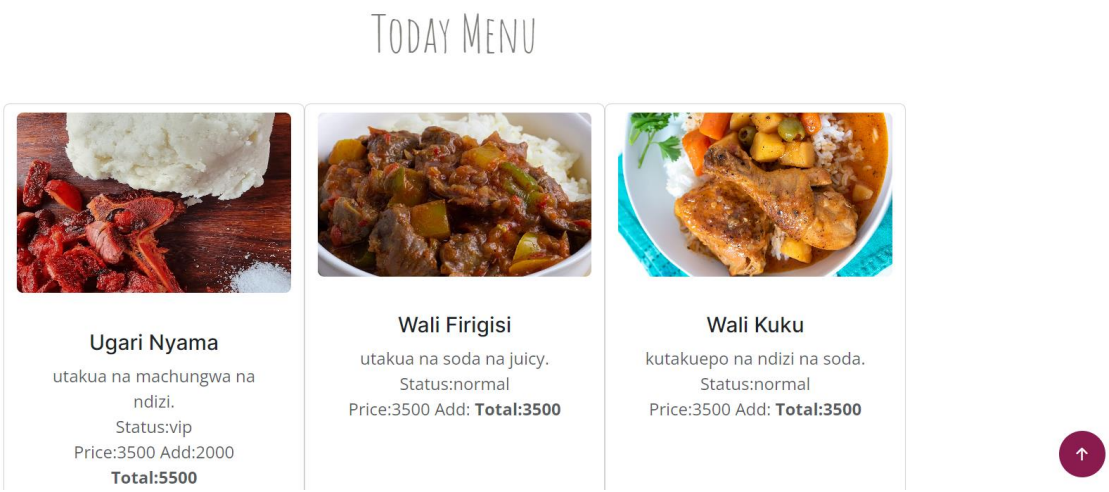

Figure 3:Today Menu

2.2 Customer Ordering Page

The ordering page is a page that the user can see after logging into the system. On this page, they can place orders for the food they desire, and they will also receive a coupon number after completing the food order.

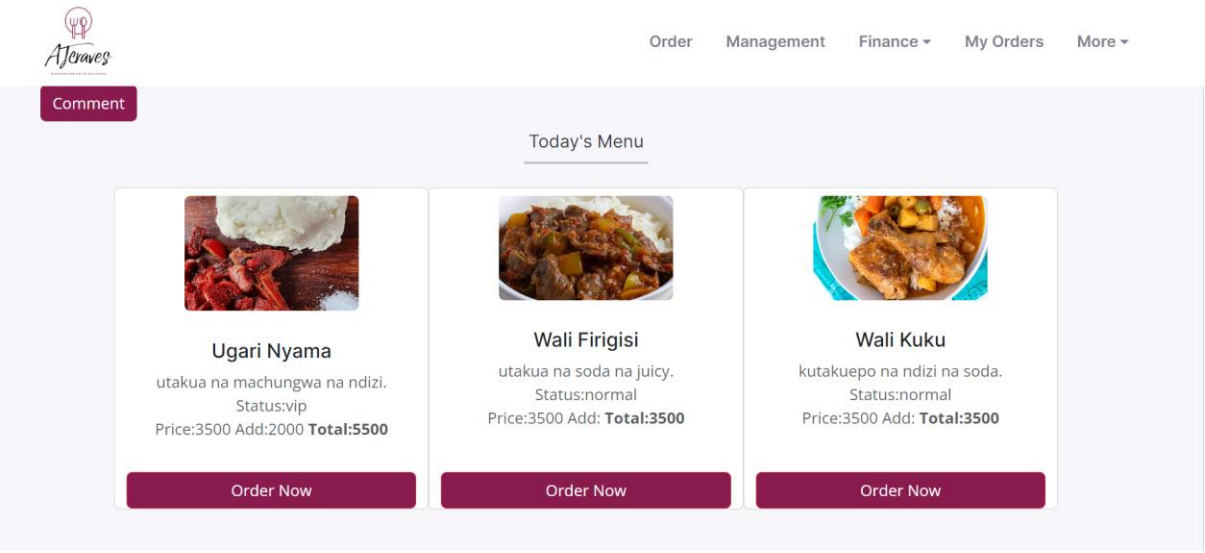

Figure 4:Ordering Page

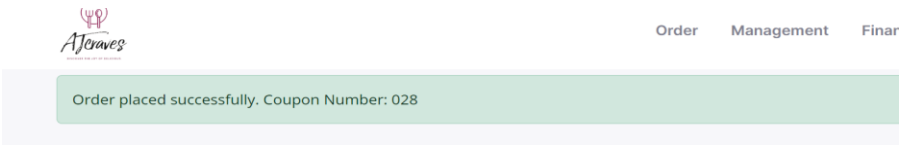

Figure 5:Coupon Number

2.3 The Moderator Dashboard Component

It's a section that displays all the features available to a moderator, such as viewing meals, posting meals, setting expiration times, setting coupon numbers, and accessing reports on ordering and food activities.

The Moderator Dashboard stands as the central hub empowering moderators with comprehensive control and oversight. It provides a panoramic view of functionalities crucial to effective moderation. From effortlessly viewing posted meals to seamlessly posting new ones, moderators can navigate through the system intuitively. The ability to set expiration times ensures timely updates, keeping the content dynamic and relevant. The feature to generate coupon numbers adds an extra layer of engagement, fostering interactions with users. Furthermore, access to detailed reports on ordering and food activities equips moderators with valuable insights, enabling informed decisions and enhancing the overall efficiency of the platform. In essence, the Moderator Dashboard is a pivotal tool, offering a rich array of capabilities for streamlined and effective moderation

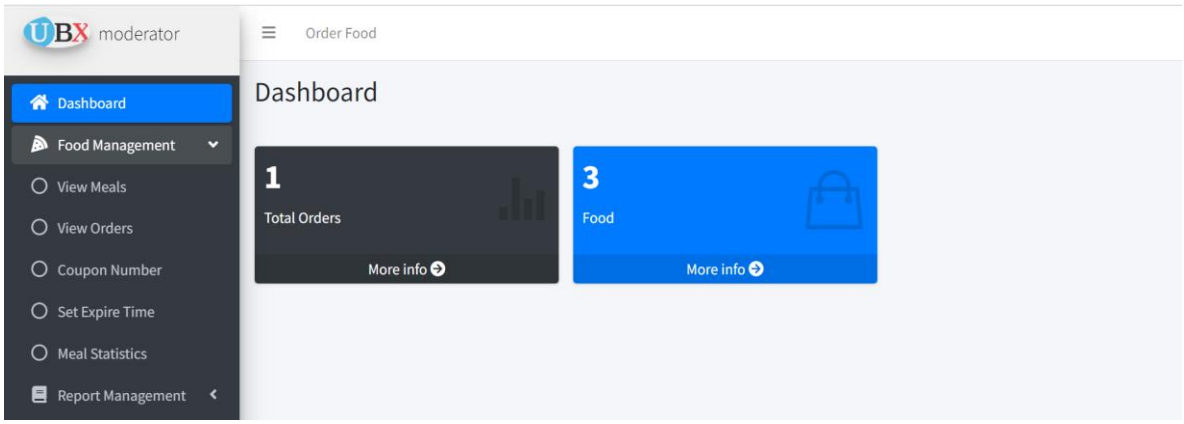

Figure 6:Moderator Component

- View Meal which consists of Add Meal and View Food where By moderator has the capability to add or post weekly specials or daily dishes, and can also delete any food items they have posted

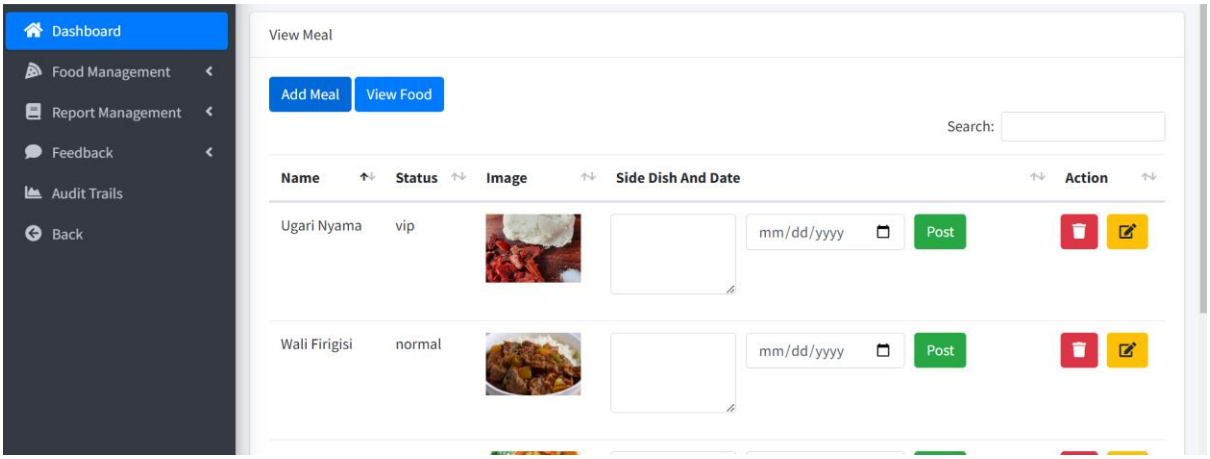

Figure 7:View Meal

- View Posted Meal, In the 'View Posted Meal' section, it displays the meals that have been posted. Additionally, it showcases today's meals, and as the day changes, it automatically updates to display tomorrow's meals by checking the day date.

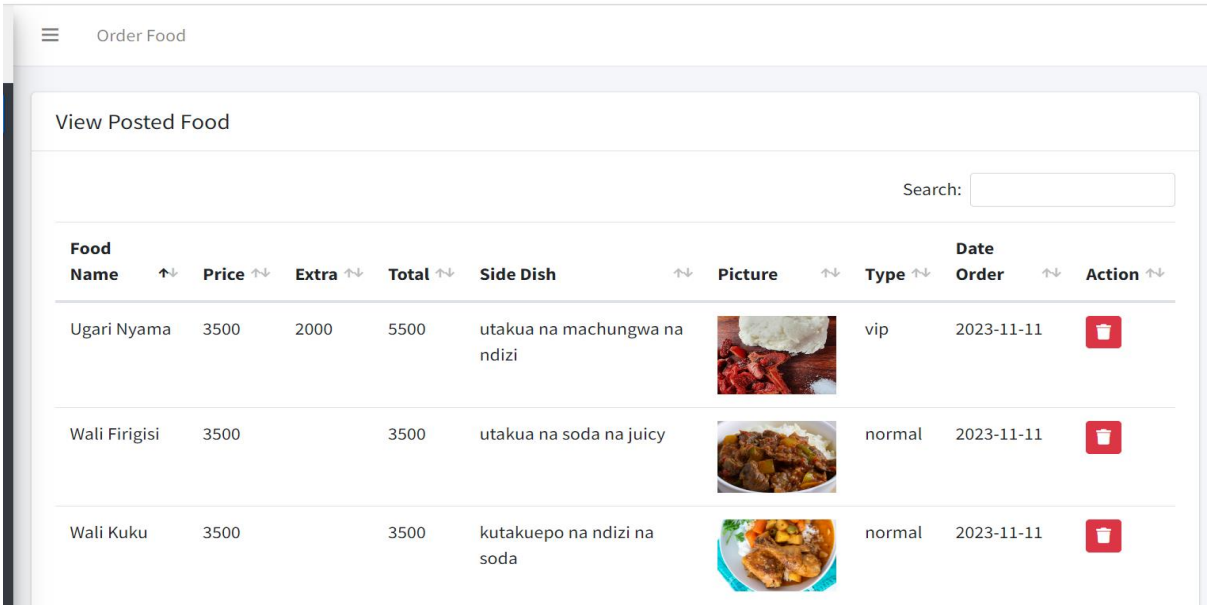

Figure 8:view posted meal

- Add New Meal, is a page designed to assist moderators in posting predefined foods that will be available for ordering. This feature enables moderators to efficiently showcase a selection of pre-determined meals for users to choose from when placing their orders

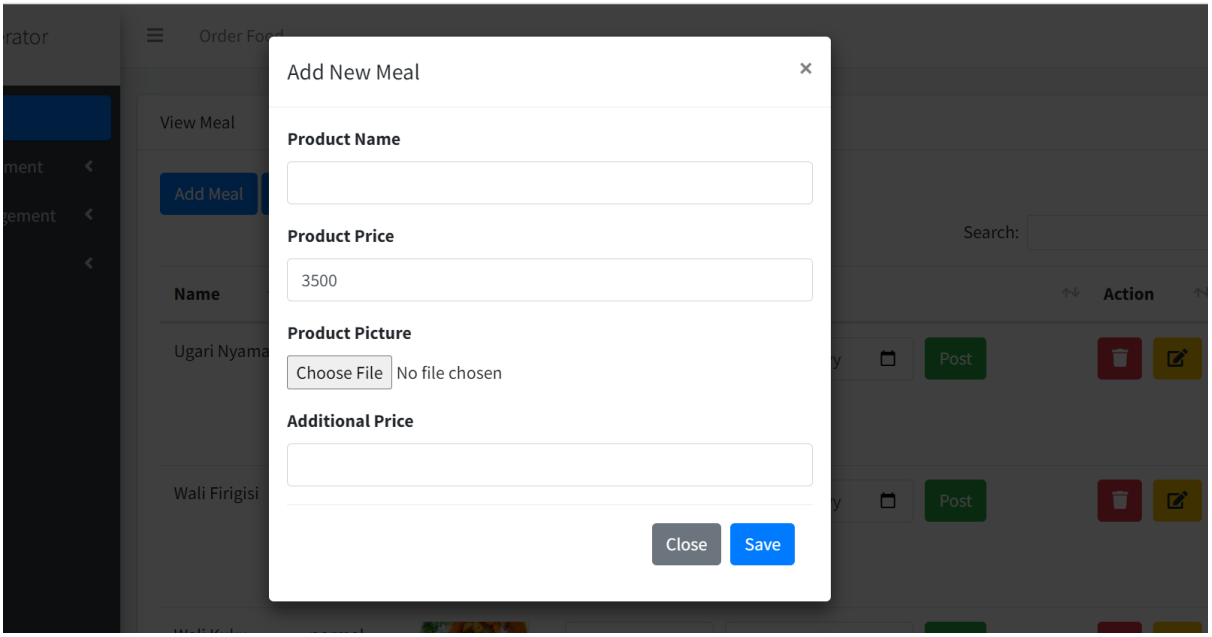

Figure 9:Add Meal

CHAPTER THREE

CONCLUSION

Industrial Practical training (IPT) has a large contribution to my studies. Because I work practically related to the theory that I learned from the class, also have added new knowledge from the training the knowledge was using Laravel framework. Although there are some challenges but IPT was fine.

This IPT has positively expanded my knowledge, providing me with practical insights that will undoubtedly enhance my academic and professional career.

RECOMMENDATIONS

Due to challenges faced before and during IPT training such as lack of place for IPT I recommend to University of Dodoma Industrial Training coordinator.

- I recommend the development using frameworks for IPT 1 for example of front-end technology like React JS, Angular, Vue.JS and back-end technology like Laravel, Django, node JS, Springboot.
- I recommended that there be enough time for students to rest before going to their

  IPT places
- I recommend that specification of required courses on cive ipt website for example the are of field should specify what programs are required
- I recommend to increase time for IPT at least 10 weeks for second year students because it will be enough to get more knowledge.
- I recommended that there should be enough time for students to rest before going to their IPT places

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