



APPENDICES



Appendix A

PSSUQ Questionnaire

Testing Evaluation Instrument for IOT Based Restaurant Information System

Name (Optional):

Occupation (Optional):

Age:

User Type:

This questionnaire will determine how usable the IOT Based Restaurant Information System in terms of System Usefulness, Information Quality and Interface Quality.

Direction: On a scale from 1-3 with Strongly Agree remarks, 4 with Neutral remark, 5-7 with Strongly Disagree, and N/A remark, please rate the following statement according to how you feel about the system:

PSSUQ Questions	1	2	3	4	5	6	7	N/A
1. Overall, I am satisfied with how easy it is to use this system.								
2. It was simple to use this system.								
3. I was able to complete the tasks and scenarios quickly using this system.								
4. I felt comfortable using this system.								
5. It was easy to learn to use this system.								
6. I believe I could become productive quickly using this system.								
7. The system gave error messages that clearly told me how to fix problems.								
8. Whenever I made a mistake using the system, I could recover easily and quickly.								
9. The information (such as online help, on-screen messages, and other documentation) provided with this system was clear.								
10. It was easy to find the information I needed.								
11. The information was effective in helping me complete the tasks and scenarios.								
12. The organization of information on the system screens was clear.								
13. The interface of this system was pleasant.								
14. I liked using the interface of this system.								
15. This system has all the functions and capabilities I expect it to have.								
16. Overall, I am satisfied with this system.								

Legend:

Questions 1 to 16: Overall Usability

Questions 1 to 6: System Usefulness (SYSUSE)

Questions 7 to 12: Information Quality (INFOQUAL)

Questions 13 to 16: Interface Quality (INTERQUA)



Appendix B

ISO 25010 (SQuaRE) Evaluation Tool

Name (Optional):

Years in the IT Industry:

Please rate the following ISO 25010 (SQuaRE) components according to the system's performance. One (1) as the lowest and five (5) as the highest.

ISO 25010 (SQuaRE) Component	1	2	3	4	5
1. Functional Suitability					
2. Performance Efficiency					
3. Compatibility					
4. Usability					
5. Reliability					
6. Security					
7. Maintainability					
8. Portability					



Appendix C

Letter To Beneficiary



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College of Computer Studies

April 19, 2023

MRS. MAROSE E. COJA
Owner
MC Seafood Restaurant
Brgy. Lantad, Silay City

[Signature]
JUNE MAR ENRIQUETA
RECEIVED BY:
4-21-23

Dear Ma'am,

Greetings!

We, the third year students of Carlos Hilado Memorial State University who are pursuing a degree in Bachelor of Science in Information Systems are required to conduct a study and develop a system project entitled "**IOT-Based Restaurant Information System**".

In partial fulfilment for our Capstone Project 1, we are writing to humbly request your time for us to conduct an interview. There will be three members from the team who are going to conduct the discussion of the initiatives of the project and gather important data for us to accomplish our study. Rest assured that the gathered data and information will be kept confidential and will only be used by the team members for the purpose of this study.

We are hoping for your kind consideration to positively respond and fulfill our request. Thank you and God bless.

Respectfully,

[Signature]
Joshua N. Maquimot
Project Leader

[Signature]
Jehu Emmanuel U. Baldago
Project Programmer

[Signature]
Juvelyn B. Coja
Quality Assurance

Noted by:

[Signature]
Jose Leo G. Redoblo, PhD.
Capstone Adviser

[Signature]
Norberto L. Monden Jr., PhD.
Capstone Professor/BSIS Chairperson

[Signature]
Engr. Russel M. Dela Torre, PhD.
CIT Dean/CSS Auxiliary Dean



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Appendix D

Letter For Capstone Adviser

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College of Computer Studies

CAPSTONE PROJECT ADVISER ACCEPTANCE FORM

Date: April 3, 2023


This is to attest that I, Jose Leo G. Redoblo, have agreed accepted to be the adviser of the following students with the Capstone Project entitled, IOT-Based Restaurant Information System.

Group Name: TRIPLE J
Course/Year/Sec: BSIS 3-B
Members:

1. Baldago, Jehu Emmanuel U.
2. Coja, Juvelyn B.
3. Maquimot, Joshua N.


Furthermore, I agree to set schedule for the advising and consultation to help the students and ensure the success of the project.

Conforme:


JOSE LEO G. REDOBLO, Ph.D.
Signature over Printed Name of Adviser

Noted:

NORBERTO L. MONDERO JR., Ph.D.
Capstone Project 1 Instructor

 college.computerstudies@chmsc.edu.ph
(034) 434 8148
chmsc.edu.ph

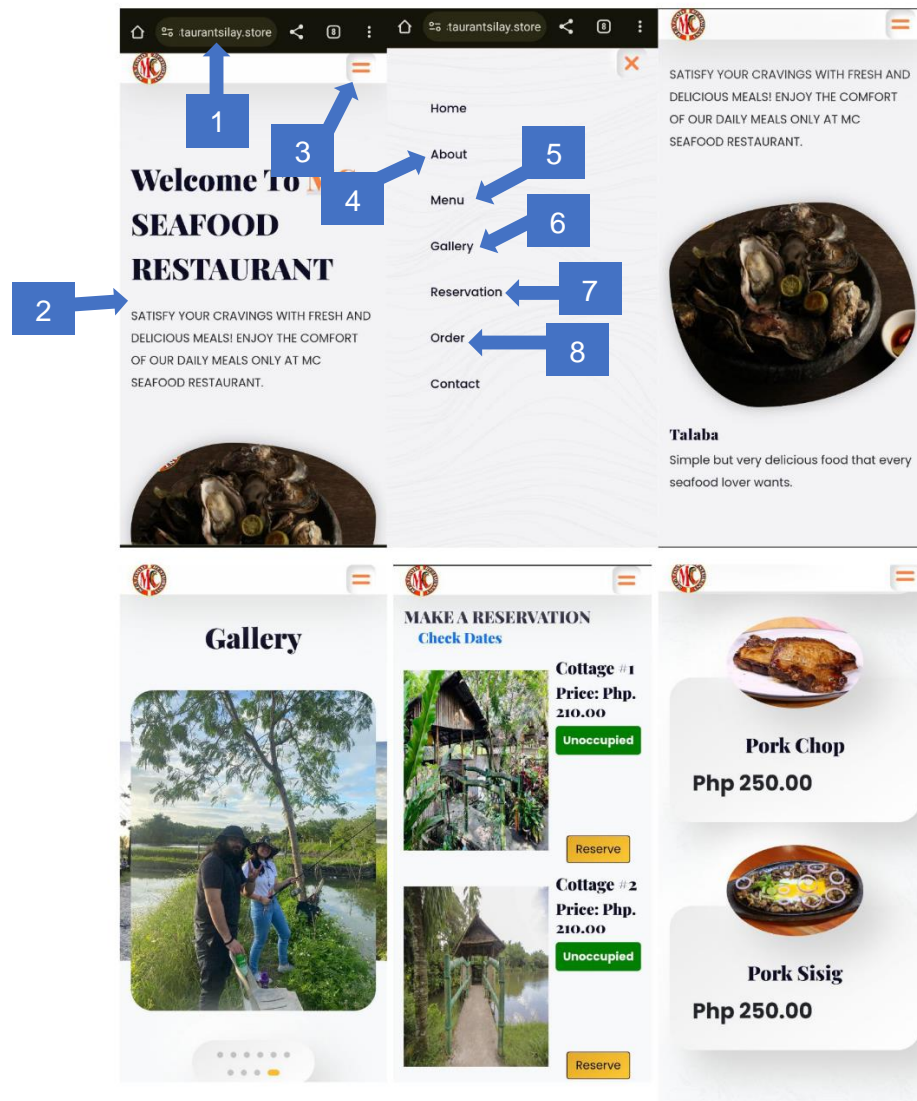
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Appendix E

User Manual





How To Use the Website

Step 1: Search the website link

Step 2: Go to website

Step 3: Click the two-line icon at the upper right side

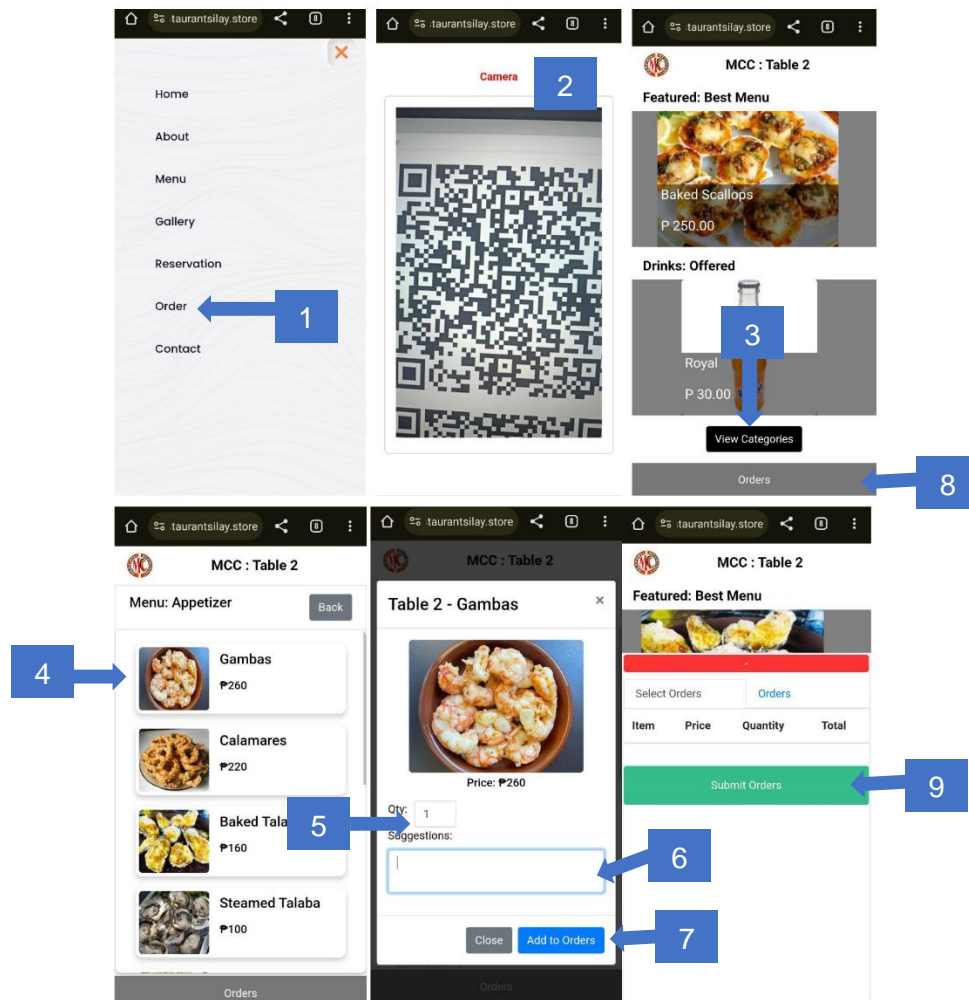
Step 4: Click about to see about the restaurant

Step 5: Click menu to see the menu list of the restaurant

Step 6: Click gallery to view the highlights in the restaurant

Step 7: Click reservation to view the available cottage and to reserve a cottage

Step 8: Click order to prompt in QR code scanner for online inhouse table QR ordering



How To Order Online

Step 1: Click order

Step 2: Scan QR code

Step 3: Click view category

Step 4: Click product

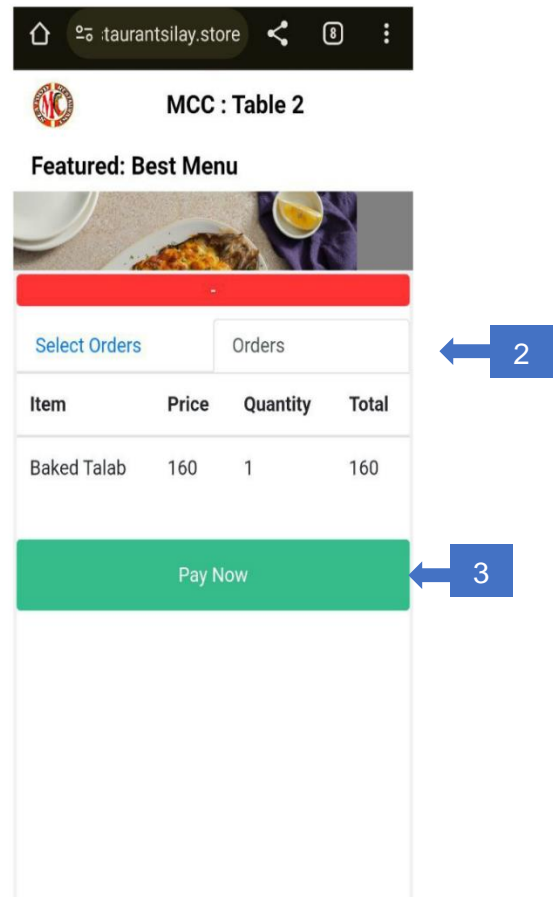
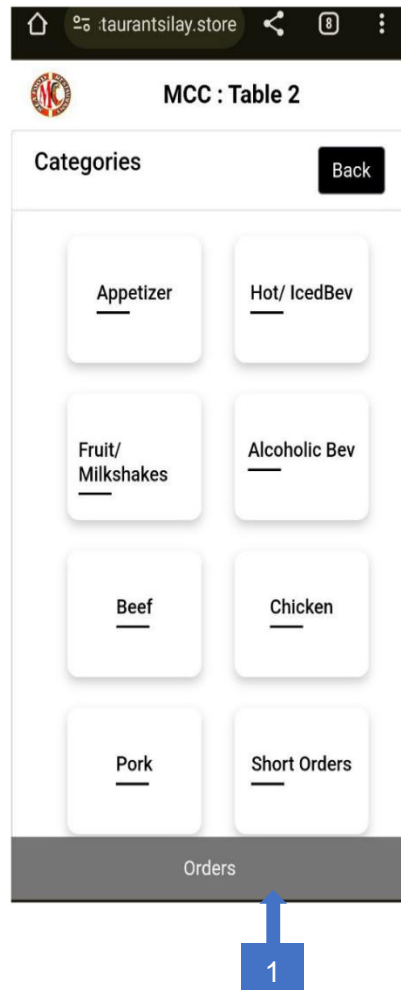
Step 5: Add quantity

Step 6: Create suggestion(optional)

Step 7: Add to cart Step

Step 8: Click orders

Step 9: Click submit orders

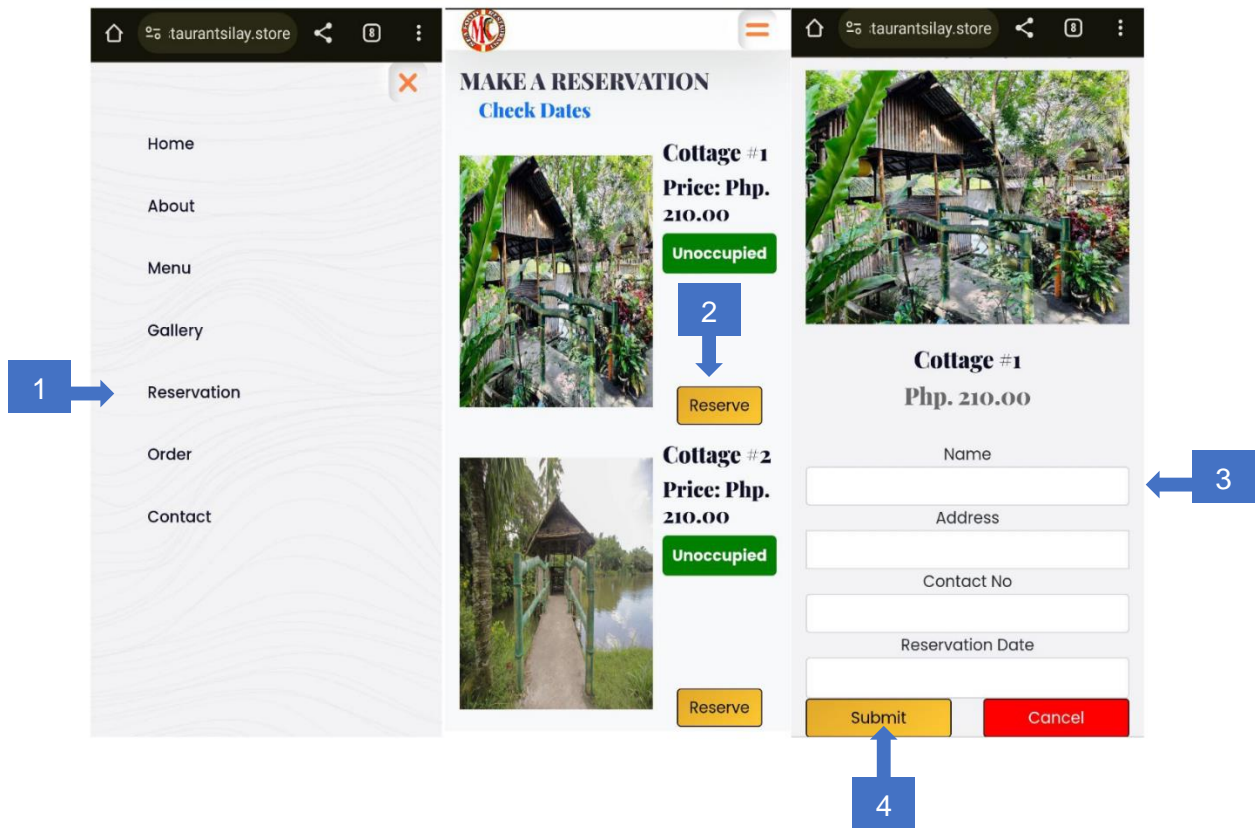


How To Pay In Mobile

Step 1: Click orders tab

Step 2: Click orders

Step 3: Pay now



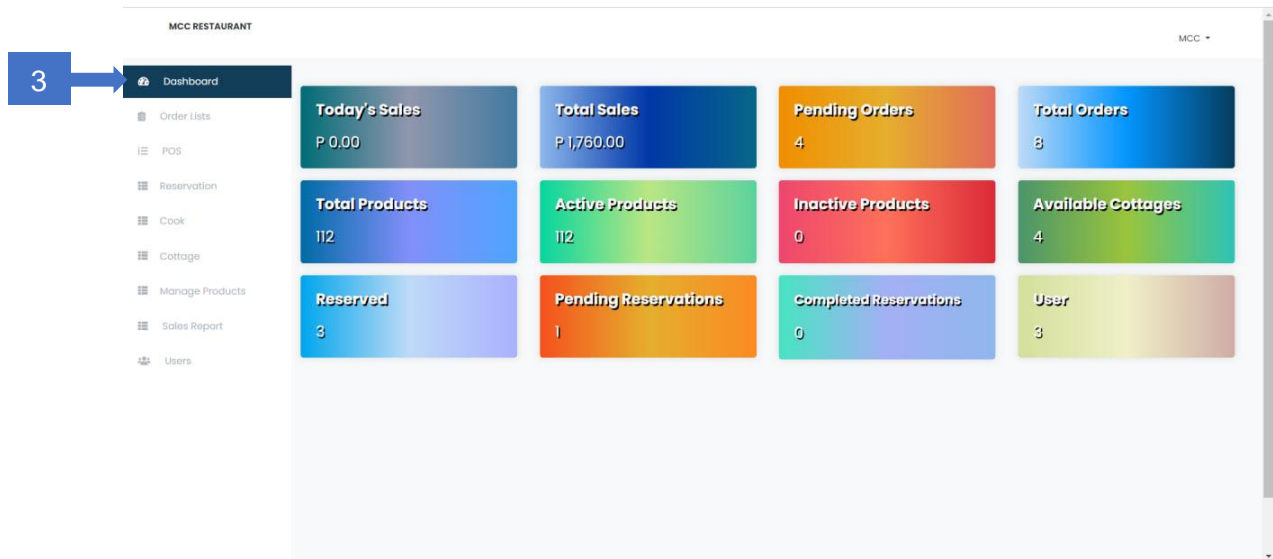
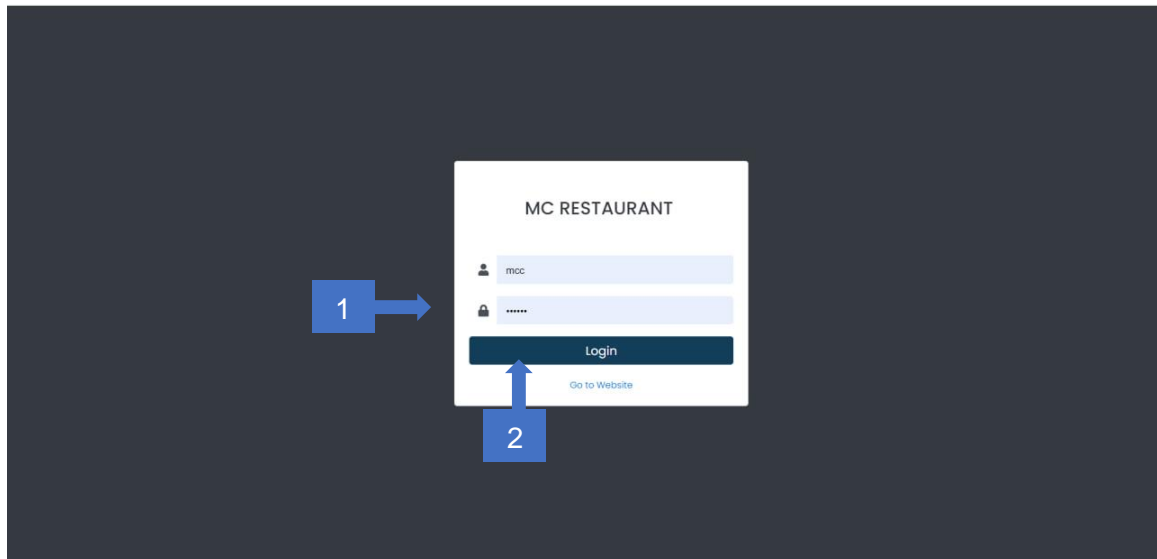
How To Make Reservations

Step 1: Click reservation

Step 2: Click reserve

Step 3: Fill all the required field

Step 4: Click Submit Step



How To Access The Dashboard

Step 1: Enter user credentials

Step 2: Click login

Step 3: Locate dashboard pages



The screenshot displays the user interface of the IOT Based Restaurant Information System. It is divided into several sections: 'Category Selection', 'Appetizer', 'Queue Table', and 'Orders'.

- Category Selection:** A horizontal row of buttons for different food categories: Appetizer, Hot/ Ice/Bev, Fruit/ Milkshakes, Alcoholic Bev, Beef, Chicken, Pork, Short Orders, and Dessert. A blue arrow labeled '1' points to this section.
- Appetizer:** A grid of appetizer items, each with a name, price, and an 'Add to Cart' button. Items include Gambas (P260.00), Calamares (P220.00), Baked Talaba (P160.00), Steamed Talaba (P100.00), Baked Scallops (P250.00), and Grilled Scallops (P220.00). A blue arrow labeled '2' points to the 'Add to Cart' button for Gambas. A blue arrow labeled '4' points to the 'Add to Cart' button for Calamares.
- Queue Table:** A section with a 'Home' button and two buttons labeled 'Table 1' and 'Table 2'. A blue arrow labeled '3' points to the 'Table 2' button.
- Orders:** A table with columns 'Menu Item', 'Qty.', 'Price', and 'Remove'. Below the table is a dropdown menu labeled '--Select a table--' and a 'Place Order' button.
- Table Orders - 1:** A modal window showing a list of orders. It has columns 'Menu Name', 'Quantity', and 'Menu Price'. The list contains: Porkchop (1, 250), Mango (1, 110), and Chocolate (1, 110). At the bottom, it shows 'Total Price: P470.00' and buttons for 'Pay' and 'Close'. A blue arrow labeled '5' points to the modal window. A blue arrow labeled '6' points to the 'Pay' button.

How To Process Order

Step 1: Select category

Step 2: Select product

Step 3: Select table

Step 4: Click add to cart

Step 5: Select and click in queue table

Step 6: Click pay



MCC RESTAURANT

Dashboard

Order Lists

POS

Reservation

Cook

Cottage

Manage Products

Sales Report

Users

List of Orders

+ New

Show 10 entries

Search:

#	Date	Amount	Status	Action
1	Nov 19, 2023	150.00	Paid	
2	Nov 19, 2023	260.00	Paid	
3	Nov 17, 2023	30.00	Paid	
4	Nov 17, 2023	60.00	Paid	
5	Nov 17, 2023	410.00	Paid	
6	Nov 17, 2023	545.00	Paid	
7	Nov 17, 2023	85.00	Paid	
8	Nov 15, 2023	220.00	Paid	

Showing 1 to 8 of 8 entries

Previous 1 Next

Queue Table

Table 1

Table 2

MCC RESTAURANT

Dashboard

Order Lists

POS

Reservation

Cook

Cottage

Manage Products

Sales Report

Users

Order Report as of November 2023

#	Date	Table Number	Amount
1	Nov 16, 2023	1	220.00
2	Nov 17, 2023	2	545.00
3	Nov 17, 2023	3	410.00
		Total	1,175.00

Print

1 page

Destination: Save as PDF

Pages: All

Layout: Portrait

More settings

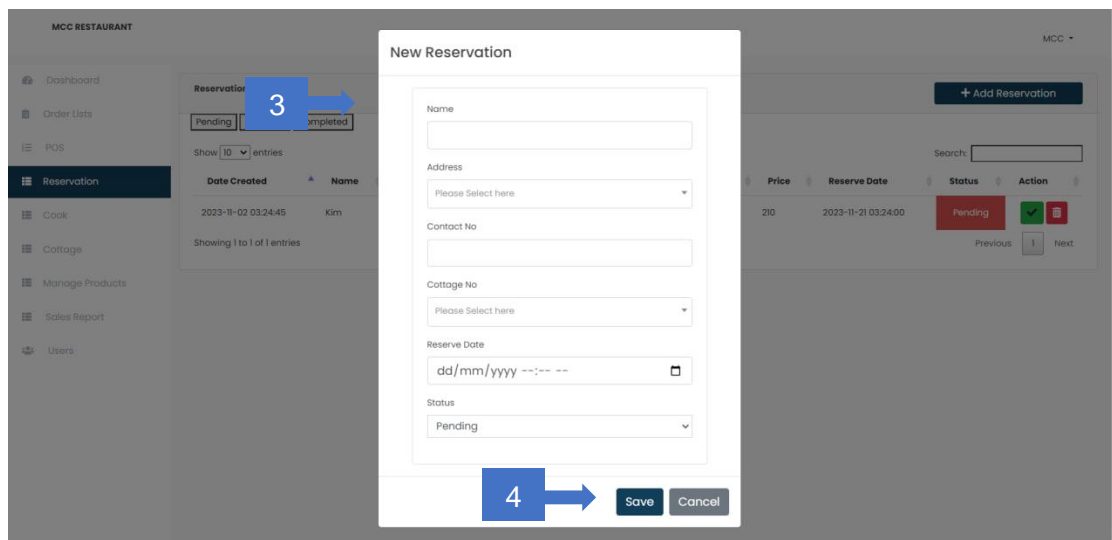
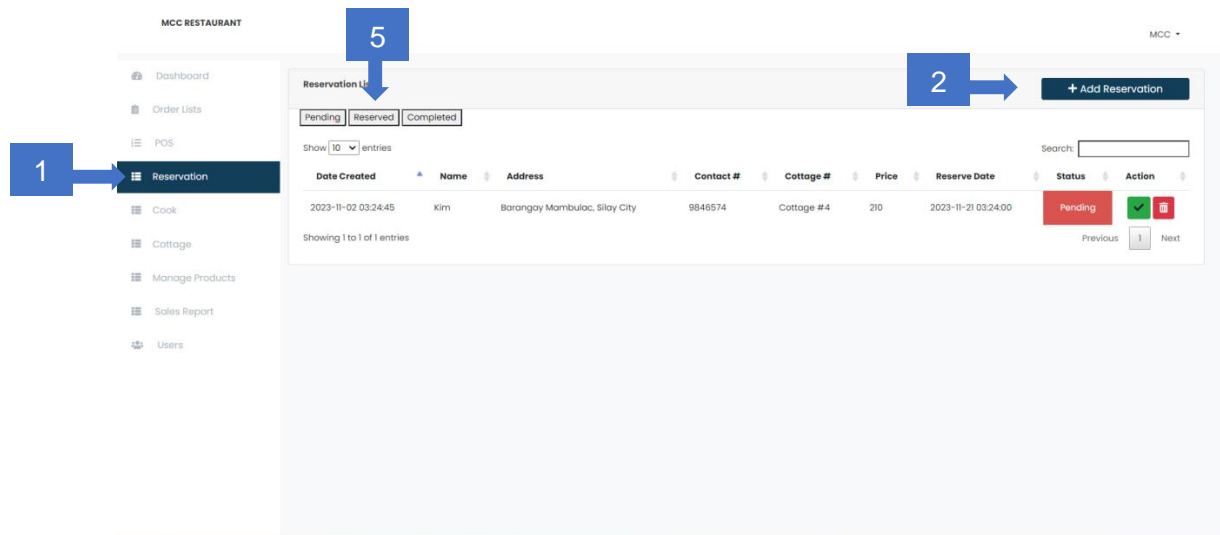
Save Cancel

How To Generate Receipt

Step 1: Click order list

Step 2: Click eye icon

Step 3: Tab keys for print



How To Process Reservation

Step 1: Click reservations

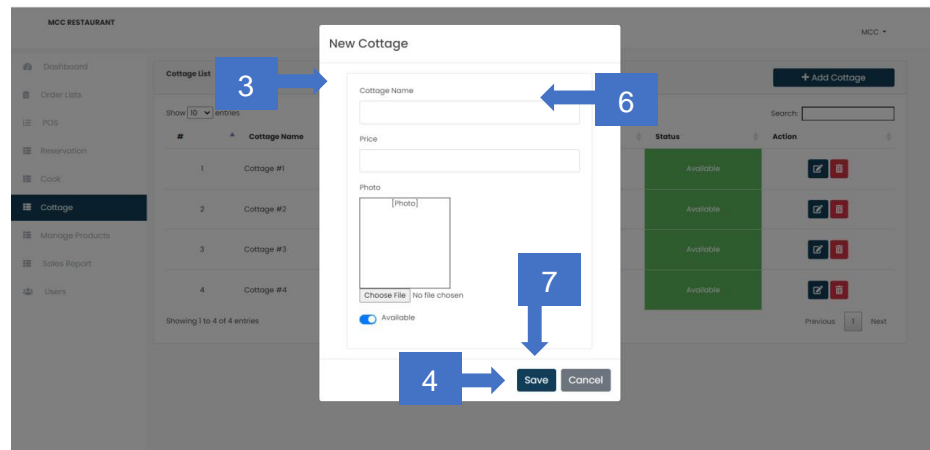
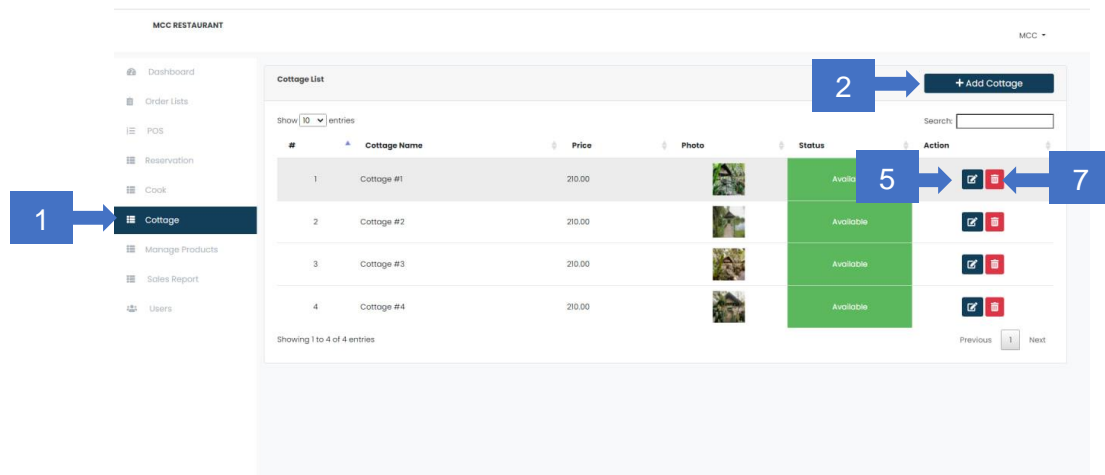
Step 2: Click add reservation

Step 3: Fill all the field

Step 4: Click save

Step 5: Click pending

Step 6: Click check icon in status to check out



How To Add/Edit/Delete Cottage

Step 1: Click cottage

Step 2: Click add cottage

Step 3: Fill all the fields

Step 4: Click save

Step 5: Click edit icon

Step 6: Edit the field needs to edit

Step 7: Click save

Step 8: Click the delete icon



#	Product Name	Category	Price	Photo	Status	Action
1	Gambas	Appetizer	260.00		Active	
2	Calamares	Appetizer	220.00		Active	
3	Baked Talaba	Appetizer	160.00		Active	
4	Steamed Talaba	Appetizer	100.00		Active	
5	Baked Scallops	Appetizer	250.00		Active	
6	Grilled Scallops	Appetizer	220.00		Active	
7	Shrimp Kinilaw	Appetizer	260.00		Active	
8	Lumpiang Shanghai	Appetizer	120.00		Active	

Product Name:

Category:

Price:

Photo: [Photo]

Choose File No file chosen

☒ Active

Save Cancel

How To Add/Edit/Delete Products

Step 1: Click manage products

Step 2: Click add product

Step 3: Fill all the fields

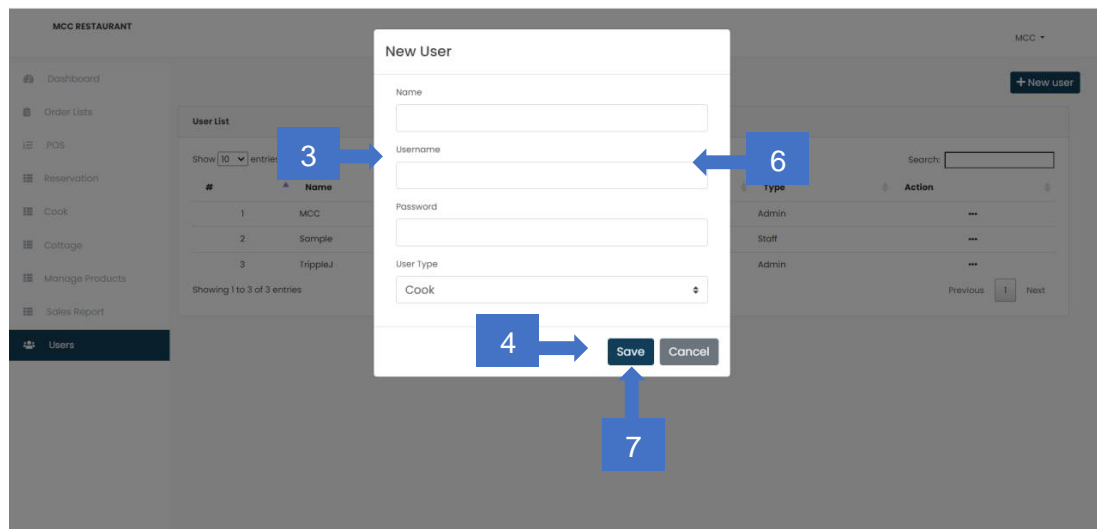
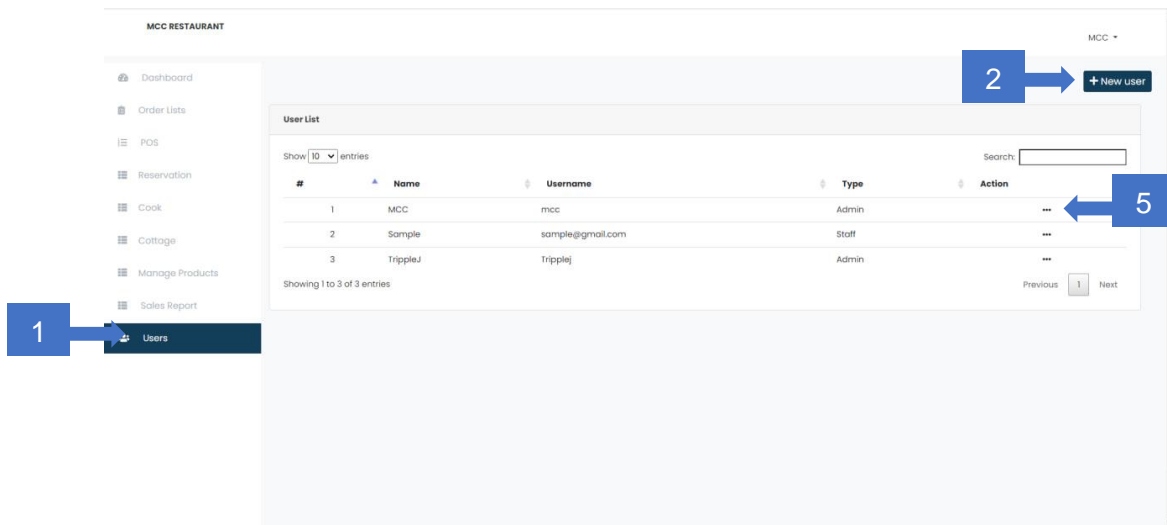
Step 4: Click save

Step 5: Click edit icon

Step 6: Edit all the forms need to edit

Step 7: Click save

Step 8: Click delete icon



How To Manage Users

Step 1: Click users

Step 2: Click add users to add

Step 3: Fill all the field

Step 4: Click save

Step 5: Click the triple dot to edit

Step 6: Edit all the field

Step 7: Click save



MCC RESTAURANT

MCC

1 → Sales Report

2 → Month: November 2023

#	Date	Table Number	Amount
1	Nov 15, 2023	7	220.00
2	Nov 17, 2023	1	545.00
3	Nov 17, 2023	2	410.00
Total			1,175.00

3 → Print

How To Generate Reports

Step 1: Click Sales Report

Step 2: Select Date

Step 3: Click Print



Appendix F

Test Cases

Test Case No.	Test Scenario	Test Steps	Expected Result	Actual Result	Pass/Fail
1. Log In account	Check if admin and staffs can log in on the system.	1. Input credentials. 2. Click log in button.	Admin and staff can log in successfully.	Admin and staff are able to log in successfully.	Pass
2. Add order details	Check if cashier is able to input orders	1. Input order by selecting from dropdowns. 2. Click add order.	Cashier will be able to add orders.	Cashier successfully added a new order.	Pass
3. Generate receipt	Check if cashier is able to generate receipt.	1. Add order details. 2. Click add order. 3. Input payment details. 4. Click print receipt.	Cashier will be able to generate receipt with order summary.	Cashier is able to generate receipt with order summary.	Pass
4. Scan QR code	Check if the customers can scan the QR code to enter ordering page.	1. Scan QR through phone. 2. Click link to enter order page.	Customer will be able to enter the ordering page.	Customer successfully entered the order page.	Pass
5. Add order details	Check if customers can add their order.	1. Select from the choices on the order page. 2. Click add.	Customer will be able to submit their order.	Customer is able to submit their order.	Pass
6. Add payment	Check if customer is able to add payment.	1. Click order button. 2. Click Pay 3. Add payment details. 4. Click submit.	Customer should be able to submit payment.	Customer is able to successfully submit payment.	Pass
7. Reserve cottage	Check if customer is able to reserve a cottage.	1. Go to cottage page. 2. Click reserve button. 3. Input details needed on the form. 4. submit reservation.	Customer should be able to submit reservation.	Customer was able to successfully submit reservation.	Pass
8. View virtual queue	Check if staff is able to view the virtual queue of order.	1. Access dashboard. 2. View order	Staff should be able to view the orders.	Staff is able to successfully view the order on queue.	Pass
9. Add menu items	Check if admin is able to add menu items.	1. Access menu items dashboard. 2. Click add menu. 3. Add details on the form and click add.	Admin should be able to add menu items.	Admin as able to successfully add menu items.	Pass
10. View summary of sales	Check if admin and staff is able to access the summary of sales.	1. Click the designated sales button. 2. Sort according to data.	Admin should be able to see the summary of sales.	Admin is able to successfully access the summary of sales and filter the data.	Pass
11. Modify reservation.	Check if admin or staff is able to modify reservations.	1. Click on reservation button. 2. Click one reservation. 3. Modify or confirm reservation.	Admin or staff should be able to modify the reservation.	Admin and staff are able to modify and update the cottage reservation.	Pass



Appendix G

Compliance Sheet

BSIS CAPSTONE PROJECT

COMPLIANCE SHEET

☐ TITLE DEFENSE ☐ PRE-ORAL DEFENSE ☒ FINAL DEFENSE

Capstone Project Title: IOT BASED RESTAURANT INFORMATION SYSTEM

Proponents: BALDAGO, JEHU EMMANUEL U., COJA, JUVELYN B.,
MAQUIMOT, JOSHUA N.

Note: Please indicate the appropriate responses to the following:

- For **Status**: the response can be noted as **Complied** or **Not Complied**. Kindly indicate page number(s) in the documents.
- During defense, you should give this document to the panelists so they can review the compliance. Additionally, include it in your slide presentation.
- For the *final manuscript* to obtain approval and proceed with bookbinding, it should be presented to the panel members for their review. Please place this document on the top of the printed materials.

MANUSCRIPT			
Recommendations	Actions Taken	Page Number	Status
Add "Acceptability" as an objective for ISO testing.	Added "Acceptability" for objective 3.	5	Complied
Add meters for sensors and shorten scope.	Specified meters for sensor detection.	6 – 7	Complied
Define words as "Operational".	Defined words as "operational".	9 – 12	Complied
Review methodology.	Reviewed and further discussed methodology.	26 – 29	Complied
Add DFD.	Added DFD level 1.	32	Complied
Specify sensor and device type.	Specified sensor type and device type.	40	Complied
Remove table 24.	Removed table 24.	N/A	Complied

SOFTWARE/SYSTEM/APP			
Recommendations	Actions Taken	Page/Interface	Status
Add button for menu maintenance.	Added button for menu availability.	Menu Dashboard	Complied
Improve UI for ordering landing page and use dropdowns.	Improved UI for ordering and added dropdowns.	Order Dashboard	Complied
Button for categories of menu.	Changed categories into buttons.	Order Dashboard	Complied
Provide unique name for tables.	Provided names for each table.	Order Dashboard	Complied
Interactions for "Pay Now" and "Pay Later" option.	Created "pop up" notification upon payment.	Payment Dashboard	Complied
Visible summations for total amount of orders.	Total order amount added.	Payment Dashboard	Complied



Indicators for staff if new order/reservation is made.	Notifications for staff.	Staff Dashboard	Complied
Confirmation for orders/pending orders.	Confirmation page for pending orders.	Staff Orders Dashboard	Complied

Prepared by:

JOSHUA N. MAQUIMOT
JUVELYN B. COJA
Project Manager
Researcher

JEHU EMMANUEL U. BALDAGO
Programmer

Verified:


JOSE LEO G. REDOBLO, PhD.
Capstone Project Adviser



Appendix H

Certification



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Research and Development Services Office

CERTIFICATION

This is to certify that the generated research output of **Baldago, Jehu Emmanuel U., Coja, Juvelyn B., and Maquimot, Joshua N.** with the research title **"IoT Based Restaurant Information System"** has gone through Grammarly and Plagiarism Check with **1%** rating.

Attaching herewith is the original copy of the manuscript with the following comments and findings issued by the Grammarly software.

This certification is issued for whatever legal purpose it may serve them best.

Issued this 18th Day of January 2024.

RICKY B. ACANTO, PhD.

Director, Research & Development Services



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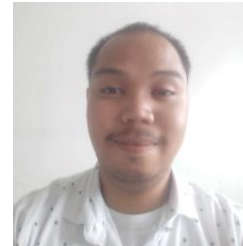


Appendix I

Curriculum Vitae

JEHU EMMANUEL U. BALDAGO

Address: Brgy. Villamonte, Bacolod City
Contact Number: 09933108297
Email: jehu.baldago@gmail.com



PERSONAL BACKGROUND

Date of Birth: December 14, 1999
Place of Birth: Bacolod City
Height: 5'1 ft.
Weight: 60 kgs.
Sex: M
Civil Status: Single
Religion: Baptist
Nationality: Filipino

EDUCATIONAL BACKGROUND

College: Carlos Hilado Memorial State University
Bachelor of Science in Information Systems
S.Y. 2020 - Present
High School: Negros Occidental High School
S.Y. 2018 – 2020
Alternative Learning School
S.Y. 2017 – 2018
Elementary: Asuncion Lizares Elementary School
S.Y. 2015 - 2017

SEMINARS ATTENDED

Synology Day 2023 – November 2023



JUVELYN B. COJA

Address: Brgy. Balaring, Silay City
Contact Number: 09668656106
Email: jbcoja.chmsu@gmail.com



PERSONAL BACKGROUND

Date of Birth: August 24,2001
Place of Birth: Silay City
Height: 5'2 ft.
Weight: 48 kgs.
Sex: F
Civil Status: Single
Religion: Roman Catholic
Nationality: Filipino

EDUCATIONAL BACKGROUND

College: Carlos Hilado Memorial State University
Bachelor of Science in Information Systems
S.Y. 2020 - Present
High School: Silay Institute
S.Y. 2018 – 2020
Dona Montserrat Lopez Memorial High School
S.Y. 2014 - 2018
Elementary: Lantad Elementary School
S.Y. 2008 - 2014

SEMINARS ATTENDED

Synology Day 2023 – November 2023



JOSHUA N. MAQUIMOT

Address: Brgy. V, Poblacion, Silay City
Contact Number: 09489960176
Email: jnmaquimot.chmsu@gmail.com



PERSONAL BACKGROUND

Date of Birth: August 10,2001
Place of Birth: Silay City
Height: 5'8 ft.
Weight: 60 kgs.
Sex: M
Civil Status: Single
Religion: Iglesia Ni Cristo
Nationality: Filipino

EDUCATIONAL BACKGROUND

College: Carlos Hilado Memorial State University
Bachelor of Science in Information Systems
S.Y. 2020 - Present
High School: Silay Institute
S.Y. 2018 - 2020
Elementary: Barangay Guimbala-on Elementary School
S.Y. 2009 - 2014

SEMINARS ATTENDED

Synology Day 2023 – November 2023