An Integrated Hotel Management System for Monica Midtown Suites

A Project Proposal Presented to the Faculty of the College

of Computer and Information Science Malayan Colleges

Mindanao, A Mapua School Gen. Douglas Mac Arthur Highway

Talomo, Davao City

In Partial Fulfillment of the

Academic Requirements for the Subject

IS Project Management

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Part I

Project Planning

Establishment Background

Monica Midtown Suites is a bed and breakfast hotel located in General Santos City, Philippines. Its business operations include hotel housekeeping, processing check-in and check-out of guests, and serving food and beverage to guests. In addition, its transactions involve customer inquiry via social media, booking websites (Agoda and Booking), or on-site, customer payment, and customer feedback.

Monica Midtown Suites' business operations are managed by Pomeleigh Salangsang, their manager. The establishment has a receptionist for customer inquiries, check-in and out process, and a housekeeping staff for both the food and beverage, and the hotel's housekeeping.

When a shift ends, the front desk must endorse all the guest forms, invoices, and special instructions to the next shift. For checking in guests, the front desk receptionist will ask if they have a reservation or just walk-in guests. Upon checking in, the front desk asks for the guest's valid

ID to attach to their guest forms. These forms contain the guest's personal information and the choice of their rooms. This also serves as the establishment's official record. The guests are then required to pay P500 as a security deposit and will be returned during the check-out process. Then, the receptionist will ask the guest's breakfast of choice which will then be forwarded to the housekeeping staff, who oversees the guests' breakfast. The receptionist will then endorse the room key and assist the guests to their room. Before their shift ends, the front desk must prepare the guest invoices, breakdowns, and breakfast, which is checked by the manager. All guest information, additional orders, and total amount of their bill must be encoded in the management's Google Sheets.

Problem Statement

The local market is becoming more competitive, and the hotel industry is struggling with a severe labor shortage. The present operational model is based on staffing level that consists of six total employees across three shifts. Per shift, there is one front desk receptionist and one housekeeper who oversees room housekeeping and guest's breakfasts and orders. The deployment of an Integrated Hotel Management System (IHMS)—which includes staff training and

development programs, automation of core operational processes, and seamless integration with external systems—is imperative to address these issues and improve overall productivity, customer satisfaction, and competitiveness in the ever-changing hospitality industry.

Goals

The goals of this project are (1) optimize staffing and operations, (2) enhance customer service, and (3) streamline housekeeping.

Objectives

To achieve the goals mentioned above, the following objectives must be met:

1. To introduce a central dashboard for the manager to monitor real-time occupancy, staff workload, and overall hotel performance.

2. To develop a feedback system to gather all guest reviews.

3. To utilize devices for housekeeping staff to update room statuses, report issues, and receive new assignments real-time.

Scope and Purpose

The scope of this project is limited to optimizing staffing and operations, enhancing customer service, streamline housekeeping, and staff training and development. The purpose of this project is to address the increasing competitiveness of the hotel industry and the establishment's labor shortage.
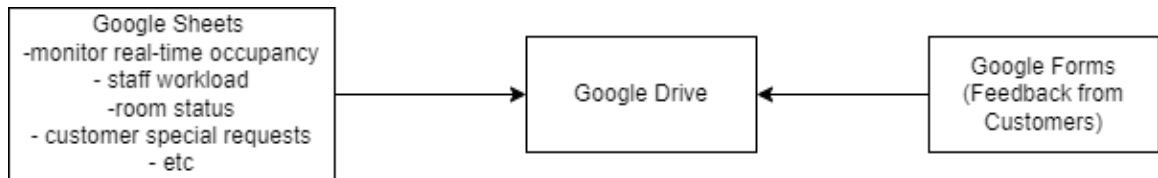
Part II

Project Framework

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┌────────────────────────────┐          ┌─────────────────┐          ┌─────────────────┐
│       Google Sheets        │          │                 │          │  Google Forms   │
│ -monitor real-time occupancy│ ──────▶ │  Google Drive   │ ◀────── │ (Feedback from  │
│     - staff workload       │          │                 │          │   Customers)    │
│       -room status         │          └─────────────────┘          └─────────────────┘
│ - customer special requests│
│          - etc             │
└────────────────────────────┘
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Figure 2.1 IHMS Framework

<div align="center">**Part III**</div>

<div align="center">**Project Methodology**</div>

Development Methodology
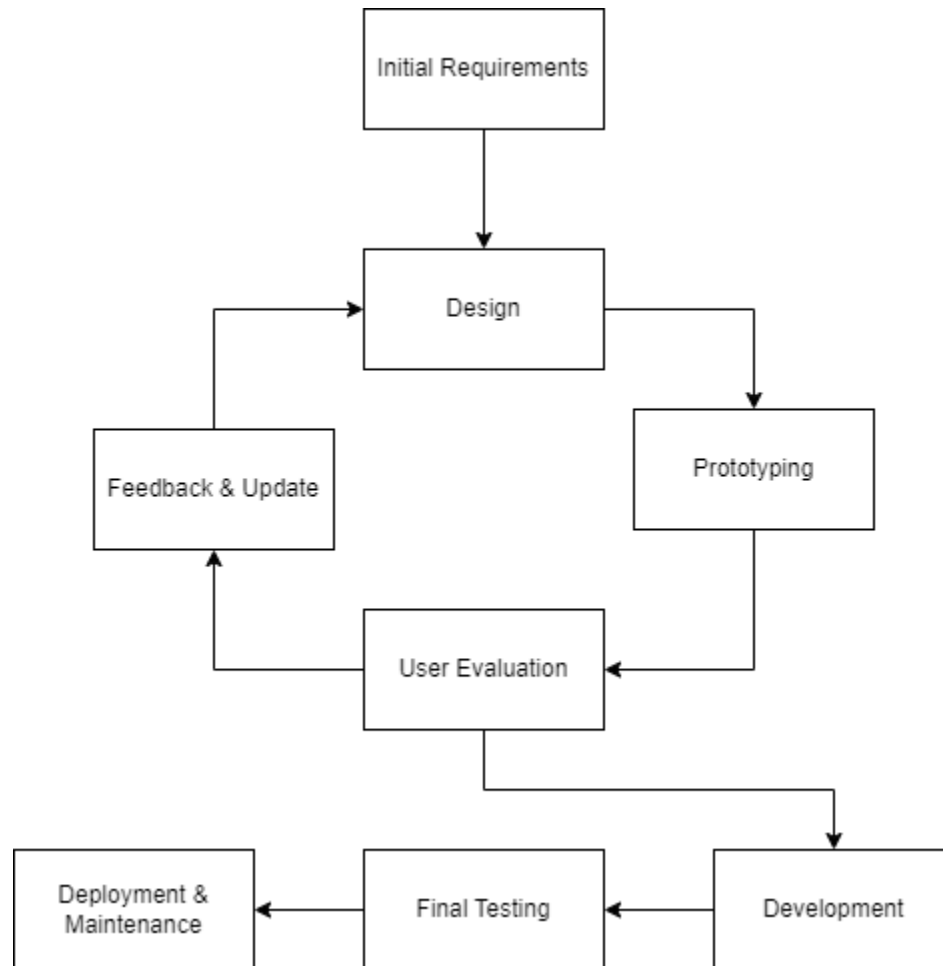

<div align="center">Figure 3.1 IHMS Development Methodology</div>

The development starts with the initial requirements phase. This is where requirements for the system are gathered.

After gathering necessary requirements, designing of the system wireframe or prototype will start. User evaluation or testing will be done on the developed prototype. If the user has feedback, that feedback will be implemented in the prototype and progress will go back to the designing phase. If the user is satisfied with the prototype, the development of the final version of the system will commence. Final testing will be done with the user. Once done, the system will be deployed to the establishment and maintenance will be done once necessary.

Testing Methods

Testing will be done by the hotel's staff, this includes the manager, front desk receptionist, and housekeeping staff.

Strategies in Development

Any preferred device and browser by the establishment will suffice. If it can access Google Workspace applications such as Sheets, Forms, and Drive.

System Deployment and Activities

During system deployment, a device is needed to access it. A desktop, laptop, or mobile device will do if it can access Google Sheets, Forms, and Drive. A Google account will also be needed, so the establishment needs to create one. In this account, this will store the main Google Sheets file for the hotel operations and staffing, and Google Forms for the customer feedback forms. Once logged in and created, the manager can monitor it in real-time as the staff are updating it during their shift.

Management of the Project

Training the staff in using the Google Sheets file is essential. Their inputs are important data needed for most of the objectives and goals to be met. Training them on what data to input, necessary formatting of those data, ethics of it, and the importance of using it should be done before fully implementing the system. Frequent checking of the integrity of the data and customer feedback forms should also be done by the manager.

Strategies in Acceptance of Project

Since this project costs less than full-blown hotel management systems, there is a big chance that the establishment would accept this project. However, without factoring cost, for the project to be accepted by the establishment, successful testing and training must be met. The staff's feedback during testing should be implemented in the project because this is a big factor in their acceptance since it is what they want for their system. Training must be given so that the staff can fully understand how the system works and the importance of it.

Part IV

Work Breakdown Structure

Table 4.1 Project WBS

Level 1	Level 2	Level 3
1. Integrated Hotel Management System	1.1. Initiation Phase	1.1.1. Information Gathering 1.1.2. Problem Identification 1.1.3. Project Goal Setting
	1.2. Definition Phase	1.2.1. Creating Project System Model 1.2.2. Developing Project Methodology and Strategies 1.2.3. Creating a WBS 1.2.4. Defining Project Team

	1.3. Execution Phase	1.3.1. Designing IHMS
		1.3.2. Prototyping
		1.3.3. Testing Prototype
		1.3.4. Gather Feedback and Update Prototype
		1.3.5. Develop System
		1.3.6. Final System Testing
		1.3.7. Deployment
	1.4. Control Phase	1.4.1. Maintenance
		1.4.2. Project Status Meeting
		1.4.3. Project Management
	1.5. Close Out Phase	1.5.1. Document Lessons Learned
		1.5.2. Gain Formal Acceptance

Part V

Project Team

Project Organization – External Interfaces

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┌─────────────────┐
│ Monica Midtown  │
│     Suites      │
└─────────────────┘
          │
          ▼
┌─────────────────┐
│    Project      │
│Manager/Developer│
└─────────────────┘
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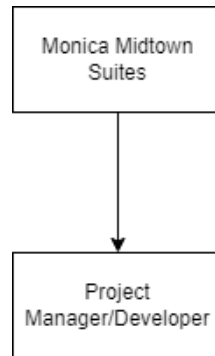
Figure 5.1 External Interfaces

Project Organization – Internal Interfaces

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                  ┌─────────────┐
                  │Hotel Manager│
                  └─────────────┘
                         │
                         ▼
┌──────────────┐  ┌──────────────┐  ┌──────────────┐
│Hotel Customer│─▶│Integrated Hotel│◀─│Hotel Front Desk│
│(Feedback Forms)│ │Management System│ │ Receptionist │
└──────────────┘  └──────────────┘  └──────────────┘
                         ▲
                  ┌──────────────┐
                  │Hotel Housekeeping│
                  │     Staff     │
                  └──────────────┘
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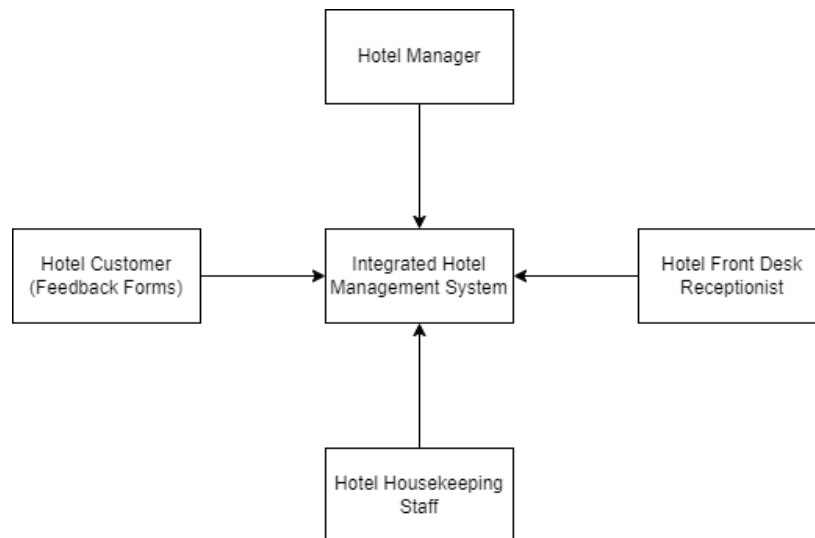
Figure 5.2 Internal Interfaces

Part VI

Project Cost

TASK ID	ACTIVITY	MANDAYS	START	END	ACTUAL	BUDGET
1	Integrated Hotel Management System					
1.1	Initiation Phase					
1.1.1	Information Gathering	0.5	01/22/2024	01/22/2024	01/22/2024	₱ 1,500.00
1.1.2	Problem Identification	0.125	01/22/2024	01/22/2024	01/22/2024	₱ 375.00
1.1.3	Project Goal Setting	0.125	01/22/2024	01/22/2024	01/22/2024	₱ 375.00
1.2	Definition Phase					
1.2.1	Creating Project System Model	0.25	01/28/2024	02/02/2024	01/28/2024	₱ 1,300.00
1.2.2	Developing Project Methodology and Strategies	0.25	01/29/2024	02/02/2024	01/29/2024	₱ 1,300.00
1.2.3	Creating a WBS	0.25	01/30/2024	02/02/2024	01/30/2024	₱ 750.00
1.2.4	Defining Project Team	0.25	02/01/2024	02/02/2024	02/01/2024	₱ 750.00
1.3	Execution Phase					
1.3.1	Designing Hotel Management System	1	02/02/2024	03/01/2024	02/05/2024	₱ 5,250.00
1.3.2	Developing Prototyping	2	02/09/2024	03/01/2024	02/26/2024	₱ 10,500.00
1.3.3	Testing Prototype	0.5	02/12/2024	03/01/2024	02/27/2024	₱ 3,000.00
1.3.4	Gather Feedback and Update Prototype	0.75	02/12/2024	03/01/2024	02/28/2024	₱ 4,500.00
1.3.5	Develop System	2	02/12/2024	03/01/2024	02/29/2024	₱ 10,500.00
1.3.6	Final System Testing	0.25	02/23/2024	03/01/2024	02/29/2024	₱ 1,500.00
1.3.7	Deployment	0.5	02/27/2024	03/01/2024	03/01/2024	₱ 2,500.00
1.4	Control Phase					
1.4.1	Maintenance	0.5	03/03/2024	03/08/2024	03/06/2024	₱ 2,500.00
1.4.2	Project Status Meetings	0.25	03/05/2024	03/08/2024	03/07/2024	₱ 1,300.00
1.4.3	Project Management	0.25	03/06/2024	03/08/2024	03/08/2024	₱ 1,300.00
1.5	Close Out Phase					
1.5.1	Document Lessons Learned	0.25	03/10/2024	03/15/2024	03/13/2024	₱ 1,300.00
1.5.2	Gain Formal Acceptance	0.25	03/11/2024	03/15/2024	03/14/2024	₱ 1,300.00

Figure 6.1 Project WBS (1/2)

COST	STATUS	PM	D	U	TOTAL
₱ 1,000.00	COMPLETE	₱ 1,000.00			₱ 1,000.00
₱ 250.00	COMPLETE	₱ 250.00			₱ 250.00
₱ 250.00	COMPLETE	₱ 250.00			₱ 250.00
		₱ 1,500.00	₱ -	₱ -	₱ 1,500.00
₱ 875.00	COMPLETE	₱ 500.00	₱ 375.00		₱ 875.00
₱ 875.00	COMPLETE	₱ 500.00	₱ 375.00		₱ 875.00
₱ 500.00	COMPLETE	₱ 500.00			₱ 500.00
₱ 500.00	COMPLETE	₱ 500.00			₱ 500.00
		₱ 2,000.00	₱ 750.00	₱ -	₱ 2,750.00
₱ 3,500.00	COMPLETE	₱ 2,000.00	₱ 1,500.00		₱ 3,500.00
₱ 7,000.00	COMPLETE	₱ 4,000.00	₱ 3,000.00		₱ 7,000.00
₱ 2,000.00	COMPLETE	₱ 1,000.00	₱ 750.00	₱ 250.00	₱ 2,000.00
₱ 3,000.00	COMPLETE	₱ 1,500.00	₱ 1,125.00	₱ 375.00	₱ 3,000.00
₱ 7,000.00	COMPLETE	₱ 4,000.00	₱ 3,000.00		₱ 7,000.00
₱ 1,000.00	COMPLETE	₱ 500.00	₱ 375.00	₱ 125.00	₱ 1,000.00
₱ 1,750.00	COMPLETE	₱ 1,000.00	₱ 750.00		₱ 1,750.00
		₱ 14,000.00	₱ 10,500.00	₱ 750.00	₱ 25,250.00
₱ 1,750.00	COMPLETE	₱ 1,000.00	₱ 750.00		₱ 1,750.00
₱ 875.00	COMPLETE	₱ 500.00	₱ 375.00		₱ 875.00
₱ 875.00	COMPLETE	₱ 500.00	₱ 375.00		₱ 875.00
		₱ 2,000.00	₱ 1,500.00	₱ -	₱ 3,500.00
₱ 875.00	COMPLETE	₱ 500.00	₱ 375.00		₱ 875.00
₱ 875.00	COMPLETE	₱ 500.00	₱ 375.00		₱ 875.00
		₱ 1,000.00	₱ 750.00	₱ -	₱ 1,750.00

Figure 6.2 Project WBS (2/2)

ROLES	DESCRIPTION	RATE/DAY (PHP)
PM	Project Manager	₱ 2,000.00
D	Developer	₱ 1,500.00
U	User	₱ 500.00

Figure 6.3 Project Rate Per Role

BUDGET PER PHASE	
PHASE	BUDGET
Initiation Phase	₱ 2,250.00
Definition Phase	₱ 4,100.00
Execution Phase	₱ 37,750.00
Control Phase	₱ 5,100.00
Close out Phase	₱ 2,600.00
TOTAL	₱ 51,800.00

Figure 6.4 Project Budget

COST PER PHASE	
PHASE	COST
Initiation Phase	₱ 1,500.00
Definition Phase	₱ 2,750.00
Execution Phase	₱ 25,250.00
Control Phase	₱ 3,500.00
Close out Phase	₱ 1,750.00
TOTAL	₱ 34,750.00

Figure 6.5 Project Cost

Part VII

Project Monitoring
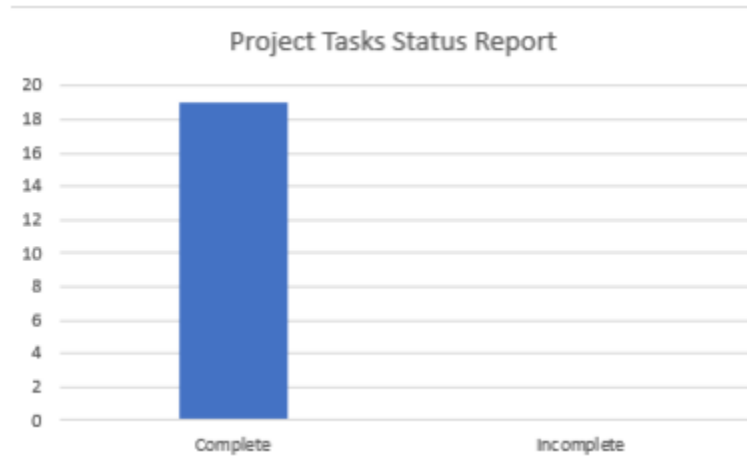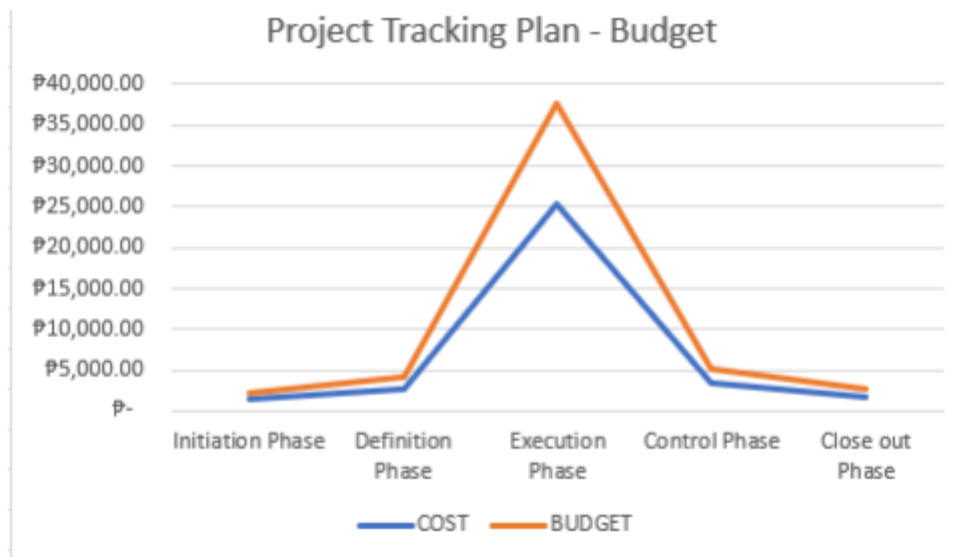

Figure 7.1 Project Tasks Status Report

Figure 7.2 Project Tracking Plan – Budget

Project Milestones	END	ACTUAL
Information Gathering	01/22/2024	01/22/2024
Problem Identification	01/22/2024	01/22/2024
Project Goal Setting	01/22/2024	01/22/2024
Creating Project System Model	02/02/2024	01/28/2024
Developing Project Methodology and Strategies	02/02/2024	01/29/2024
Creating a WBS	02/02/2024	01/30/2024
Defining Project Team	02/02/2024	02/01/2024
Designing Hotel Management System	03/01/2024	02/05/2024
Developing Prototyping	03/01/2024	02/26/2024
Testing Prototype	03/01/2024	02/27/2024
Gather Feedback and Update Prototype	03/01/2024	02/28/2024
Develop System	03/01/2024	02/29/2024
Final System Testing	03/01/2024	02/29/2024
Deployment	03/01/2024	03/01/2024
Maintenance	03/08/2024	03/06/2024
Project Status Meetings	03/08/2024	03/07/2024
Project Management	03/08/2024	03/08/2024
Document Lessons Learned	03/15/2024	03/13/2024
Gain Formal Acceptance	03/15/2024	03/14/2024

Figure 7.3 Project Tracking Plan – Schedule