NAME	ALDREN LOUIE L. REYES
PROJECT TITLE	**ClientSphere: Customer Relationship Management System**
SUBJECT: CODE: TIME:	**IT15/L Integrative Programming and Technologies** **8441** **10:00 am - 12:00 nn**
TOPIC (Type of Business Process)	**#5 Customer Relationship Management (CRM)**
Products/Services	**Sales and Service-Oriented Business**
Tools Needed:	Visual Studio 2022– IDE, SSMS, Domain, Hosting
Technology:	C#, ASP.NET Core, HTML5, CSS3, SQL Server Management Studio, Microsoft Graph API, Stripe API, SendGrid API
Security Features	Role-Based Access Control (RBAC), User Authentication, Authorization and Permission Management, Data Encryption, Audit Logs and Activity Monitoring, Secure Session Management, Input Validation and Protection Against Common Attacks
Target user/s:	Customers/Clients, Sales Manager, Sales Staff, Marketing Manager, Customer Support Staff, Billing Staff, System Administrator
Subs System / Management Transaction/Modules	1.Customer Master Data 2.Sales Management 3.Customer Support / Ticketing 4. Marketing Campaign Management 5.Billing and insurance integration

LOGO	ClientSphere Customer Relationship Management System
Project Objectives:	1. To develop a centralized Customer Master Data module that securely stores and manages complete customer information, including contact details, interaction history, and transaction records, to ensure accurate and consistent customer data shared across all system modules. 2. To implement a Sales Management module that allows users to record sales transactions, manage client meeting schedules, and analyze performance, enabling the organization to identify trends and improve revenue management. 3. To design a Customer Support and Service Module that centralizes client inquiries, complaints, and warranty claims. This module converts incoming requests into tracked "cases" or "tickets," enabling support staff to view the customer's purchase history and resolve issues efficiently 4. To integrate a Marketing Campaign Management module that supports the creation, monitoring, and evaluation of marketing campaigns, promotions, and customer engagement activities to help businesses improve customer retention and brand awareness. 5. To develop a Billing and Invoice Integration module that automatically generates invoices from sales data, tracks customer payments, and maintains accurate billing records to reduce manual errors and improve financial transparency.

Project Description:	
	ClientSphere is a web-based Customer Relationship Management (CRM) system designed for businesses focused on sales and customer service. It provides an all-in-one platform to manage customer interactions and streamline business processes. Built with an Enterprise Resource Planning (ERP) approach, ClientSphere integrates multiple business functions into a single centralized system using a shared database. The system includes five main modules: Customer Master Data, Sales Management, Customer Support and Ticketing, Marketing Campaign Management, and Billing and Invoice Management.

The system is designed for different types of users, including administrators, sales teams, customer support staff, marketing teams, and billing personnel. Each user is granted access based on their role, ensuring data security and proper usage across departments.
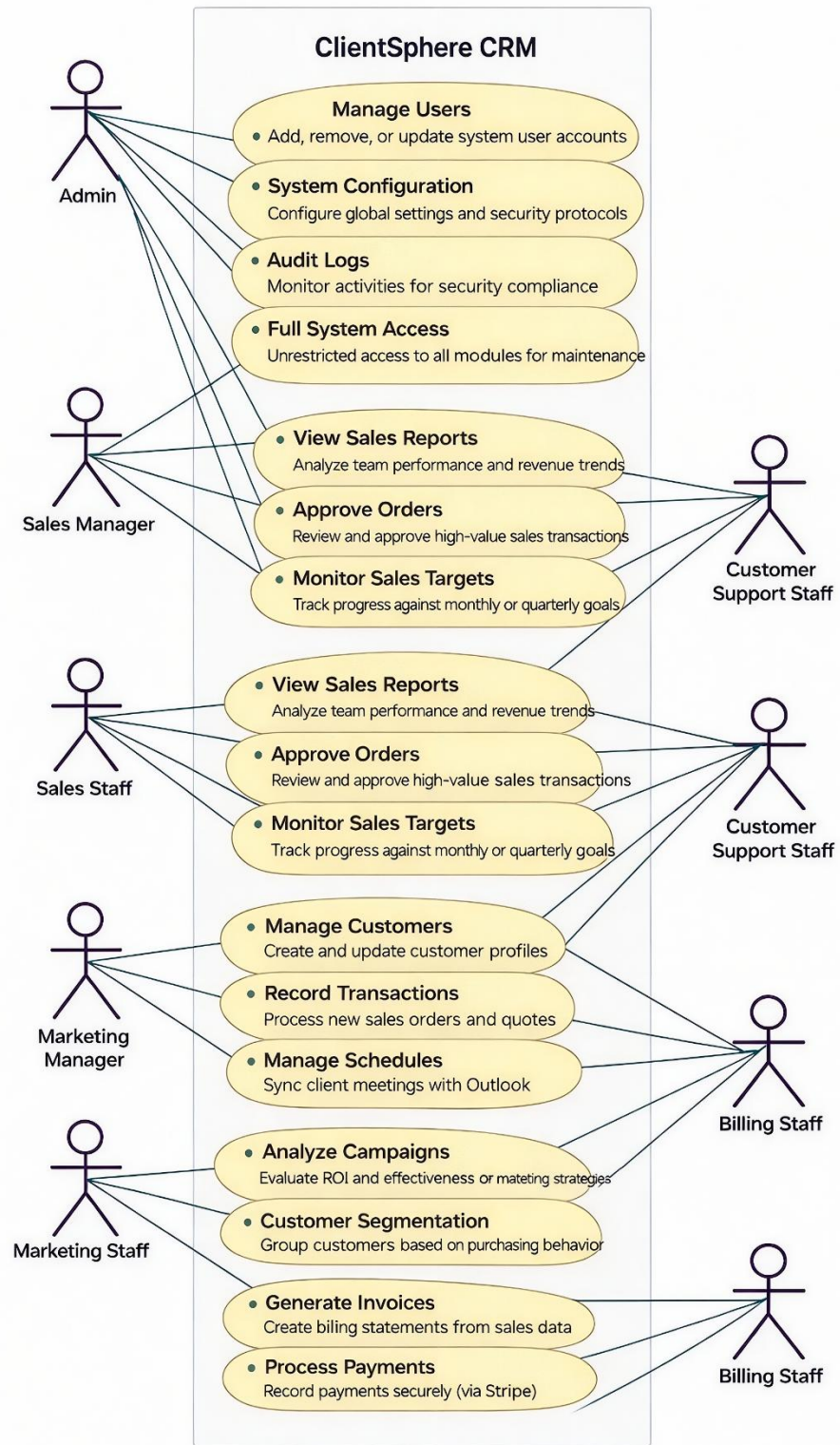
ClientSphere helps businesses overcome common challenges such as customer information being stored in multiple, disconnected locations, which can lead to duplicate records, errors, and delays. It also addresses inefficient sales tracking, slow support responses, unorganized marketing campaigns, and manual billing processes. By centralizing these functions, the system improves operational efficiency, ensures accurate data, enhances collaboration between departments, and increases overall customer satisfaction.

To enhance functionality, the system integrates three key APIs. The Microsoft Graph API syncs sales schedules and meetings directly with staff Outlook calendars. An Email Notification API automates communication by sending updates for support tickets, billing reminders, and marketing campaigns. A Payment API helps confirm payment statuses and automatically updates billing and invoice records, ensuring accurate financial tracking.

ClientSphere is built using modern web technologies, including ASP.NET Core for backend logic, SQL Server for database management, and responsive web technologies for the interface. These technologies were chosen for their reliability, security, and ability to support scalable, enterprise-level applications.

Overall, ClientSphere provides businesses with a powerful, ERP-based CRM solution that improves decision-making, strengthens customer relationships, and enhances overall business performance. |

Use Case Diagram

(Role-Based Access)

ClientSphere CRM

Admin

Manage Users
- Add, remove, or update system user accounts

- **System Configuration**
  Configure global settings and security protocols

- **Audit Logs**
  Monitor activities for security compliance

- **Full System Access**
  Unrestricted access to all modules for maintenance

Sales Manager

- **View Sales Reports**
  Analyze team performance and revenue trends

- **Approve Orders**
  Review and approve high-value sales transactions

- **Monitor Sales Targets**
  Track progress against monthly or quarterly goals

Customer Support Staff

Sales Staff

- **View Sales Reports**
  Analyze team performance and revenue trends

- **Approve Orders**
  Review and approve high-value sales transactions

- **Monitor Sales Targets**
  Track progress against monthly or quarterly goals

Customer Support Staff

Marketing Manager

- **Manage Customers**
  Create and update customer profiles

- **Record Transactions**
  Process new sales orders and quotes

- **Manage Schedules**
  Sync client meetings with Outlook

Billing Staff

Marketing Staff

- **Analyze Campaigns**
  Evaluate ROI and effectiveness or mateting strategies

- **Customer Segmentation**
  Group customers based on purchasing behavior

- **Generate Invoices**
  Create biling statements from sales data

- **Process Payments**
  Record payments securely (via Stripe)

Billing Staff

	Role-Based Access for Customer Relationship Management (CRM)
	Admin
	• Manage Users & Permissions • System Configuration • Full System Access & Audit Logs
	Sales Manager
	• View Sales Reports & Analytics • Monitor Sales Team Performance • Approve High-Value Orders
	Sales Staff
	• View/Add Customers • Create & Update Sales Records • Manage Client Meeting Schedules
	Customer Support Staff
	• View Customer Profiles • Create & Update Support Tickets • Trigger Email Notifications • Resolve Issues
	Marketing Manager
	• Track Campaign Performance & ROI • Analyze Customer Engagement Reports
	Marketing Staff
	• Create Marketing Campaigns • Manage Promotions & Email Blasts
	Billing Staff
	• Generate Invoices • Process Online Payments • Update Billing Records
Date Submitted:	January 29 2026
Teacher's Feedback	

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	_____ _____ Student's Signature (after feedbacking) Teacher's Signature