

Software Design Document

Customer relationship management - Web
Application

Version 1.0

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Revisions

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1.0	Data pirates	Initial Release	27-10-2023

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1. Introduction

1.1 Purpose

The purpose of a CRM web application project is to create a digital system that helps businesses efficiently manage and improve their interactions and relationships with customers.

1.2 Scope

The purpose of a CRM web application project is to create a digital API that helps businesses efficiently manage and improve their interactions and relationships with customers. It defines the specific functionalities, features, and objectives that the project will encompass. It outlines what the CRM system will and will not include, serving as a clear roadmap for the project.

1.3 Definitions, Acronyms and Abbreviations

Acronym	Meaning
SDD	Software design document
API	Application Programming Interface
CRM	Customer Relationship management

1.4 References

- Bootstrap react,css.
- Google
- wikipedia

2. System Overview

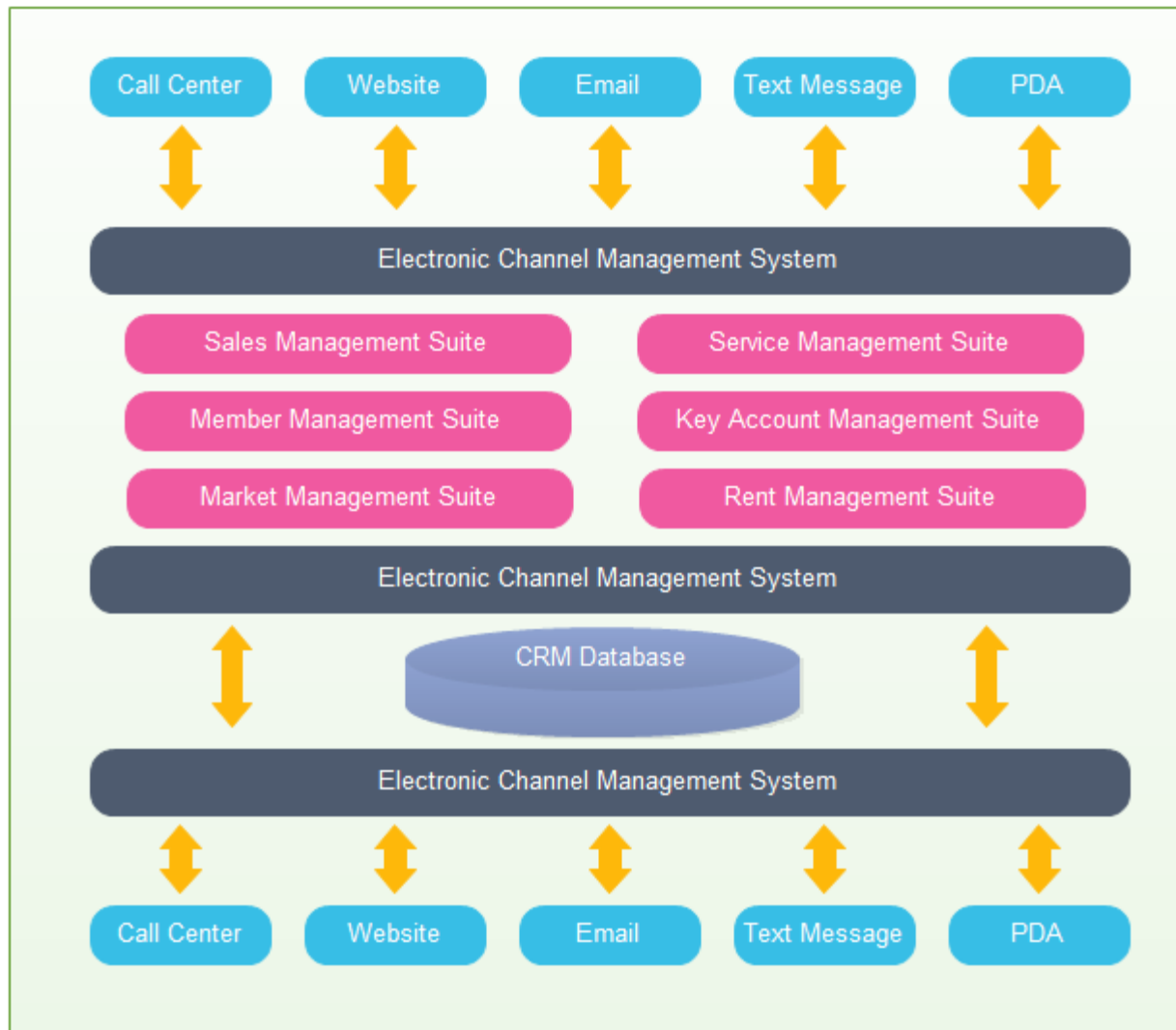


FIGURE 1

This CRM web application project aims to create a comprehensive digital solution for effective customer relationship management. It will centralize customer data, enabling efficient contact and lead management, sales opportunity tracking, and marketing campaign management. The system will also provide customer support functionalities, insightful analytics, and workflow automation. It is designed to be highly customizable to align with the business's unique processes and integrate seamlessly with other tools, such as email, e-commerce, and social media. The project will be completed within the specified timeline and budget, with a clear focus on improving customer relationships, boosting sales, and enhancing operational efficiency.

In summary, this CRM web application project seeks to streamline and optimize customer interactions, sales processes, and marketing efforts while providing valuable insights through data analytics and reporting. It will play a pivotal role in improving customer satisfaction and overall business performance.

3. System Components

3.1 Decomposition Description

Top Down Details

8. Top Level Context Diagram

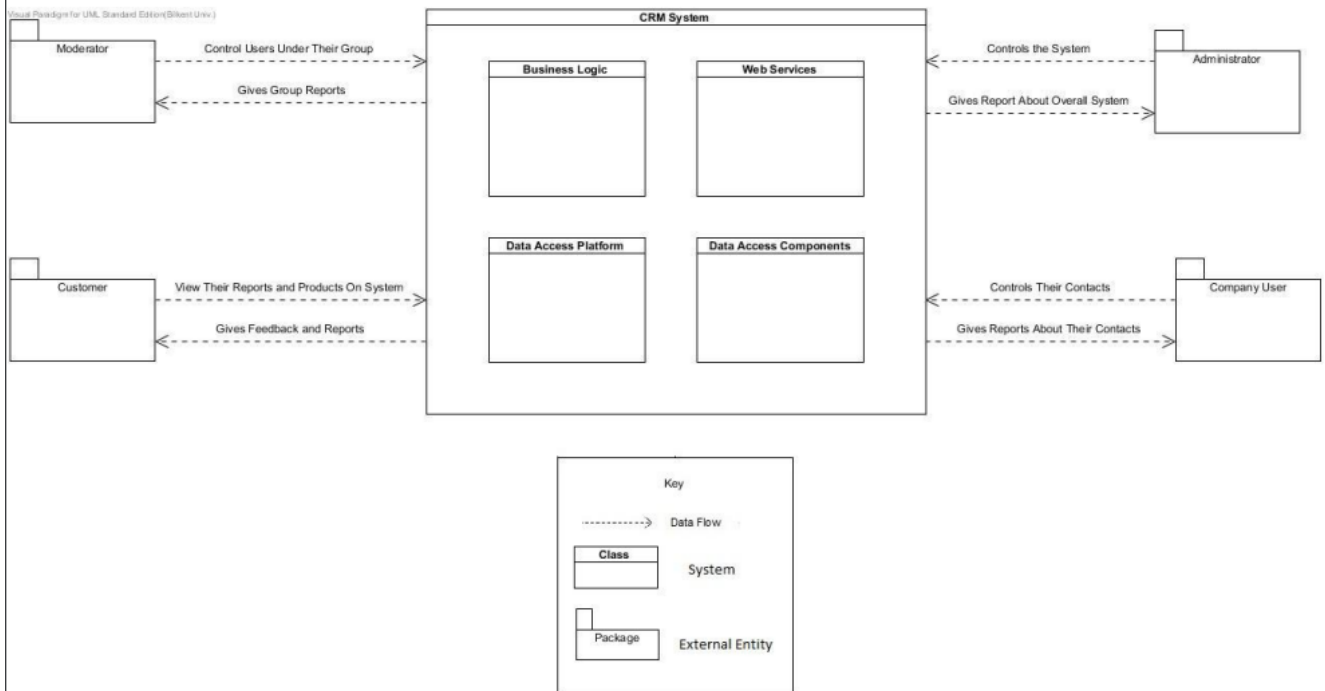


Figure 10 Top Level Context Diagram

Top level context diagram of the system includes four other internal systems which are Business Logic, Web Services, Data Access Platform and Data Access Components. In addition to these, there are four external entities which interact with the system itself. These external entities are:

- Moderator is one of the external entities that interact with the system. System gives reports about moderator's group and moderator controls the users under their group through the system functions.
- Customer is also an external entity who views related reports and products through system. They get feedback and report from the system.
- Administrator controls the overall system as a external entity and system gives reports about overall system to administrator.
- Company User is also an external entity that controls their contacts and gets reports from the system about their contacts and so on.

3.2 Dependency Description

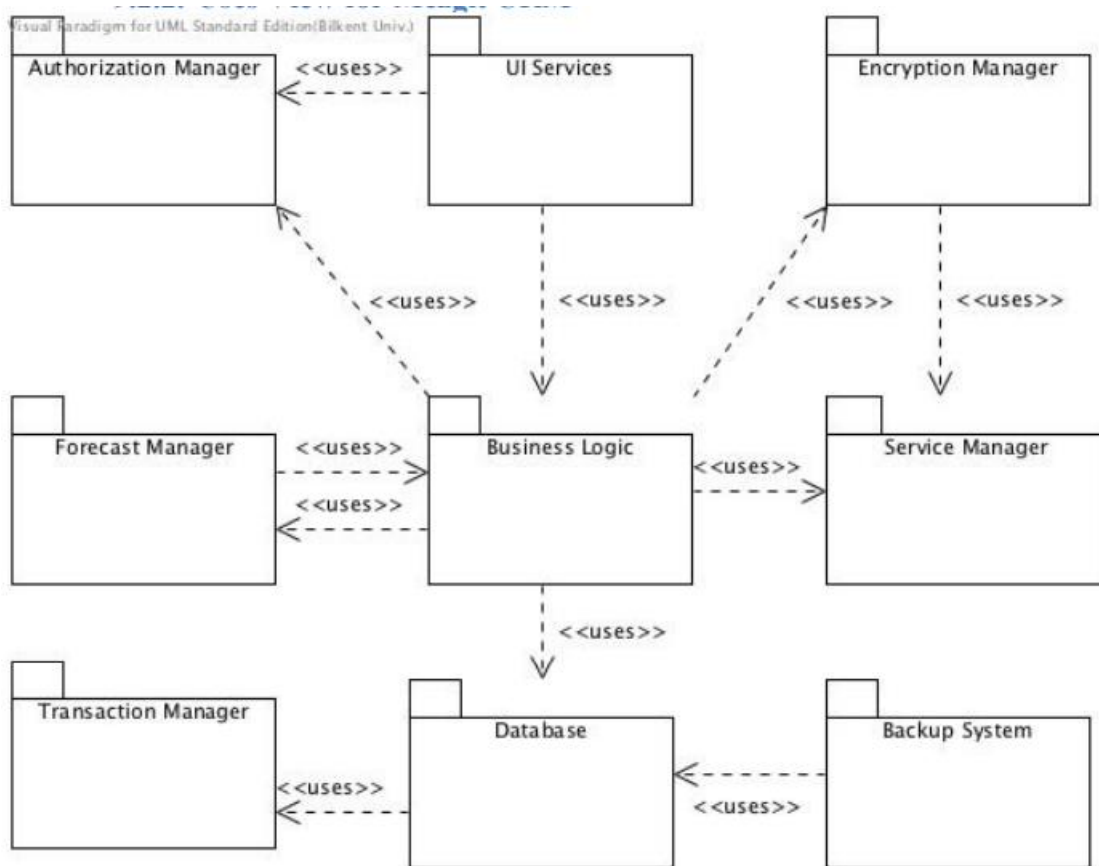
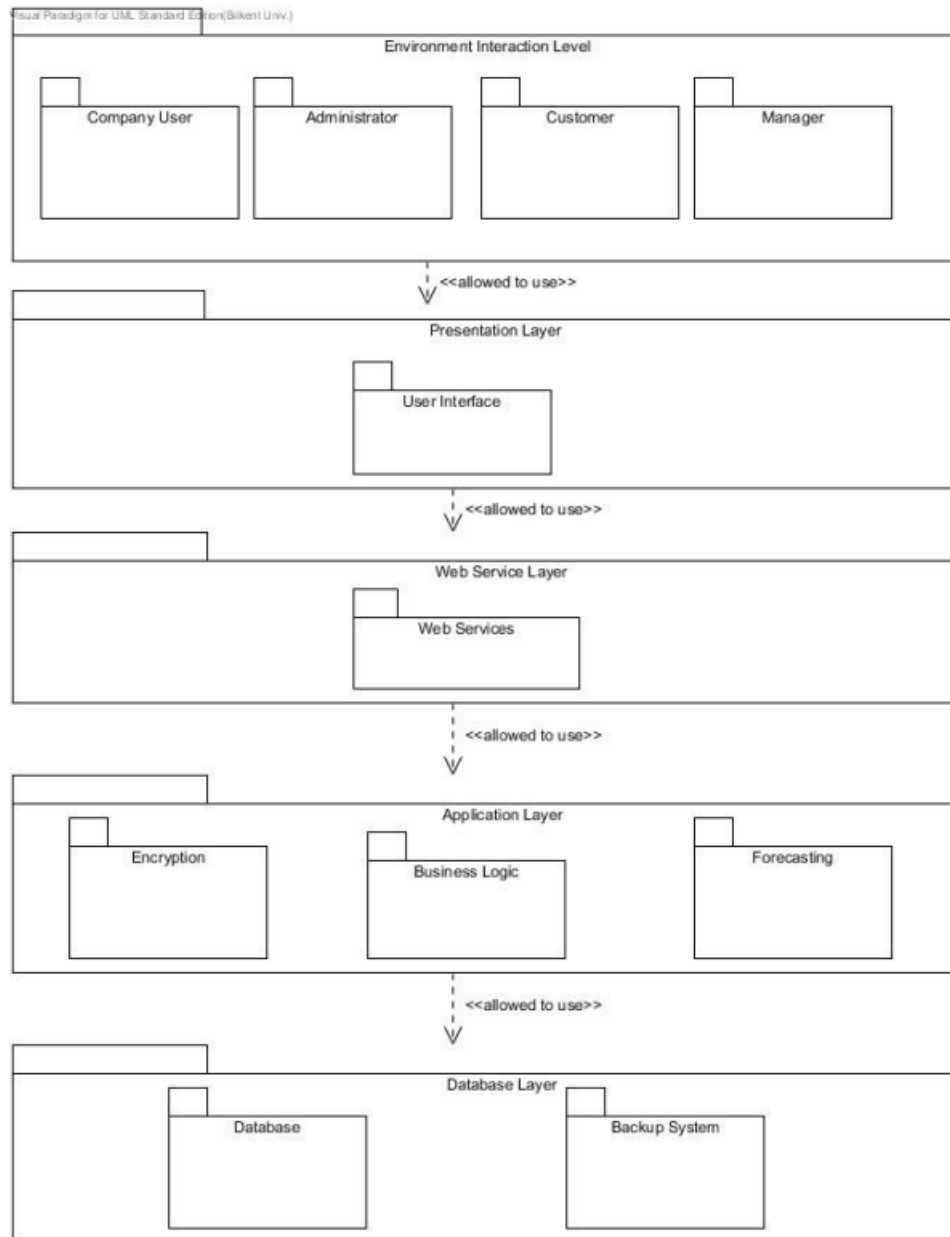


FIGURE 3

The uses style shows the relationships between modules and sub-modules. This view is very helpful for implementing, integrating and testing the system.

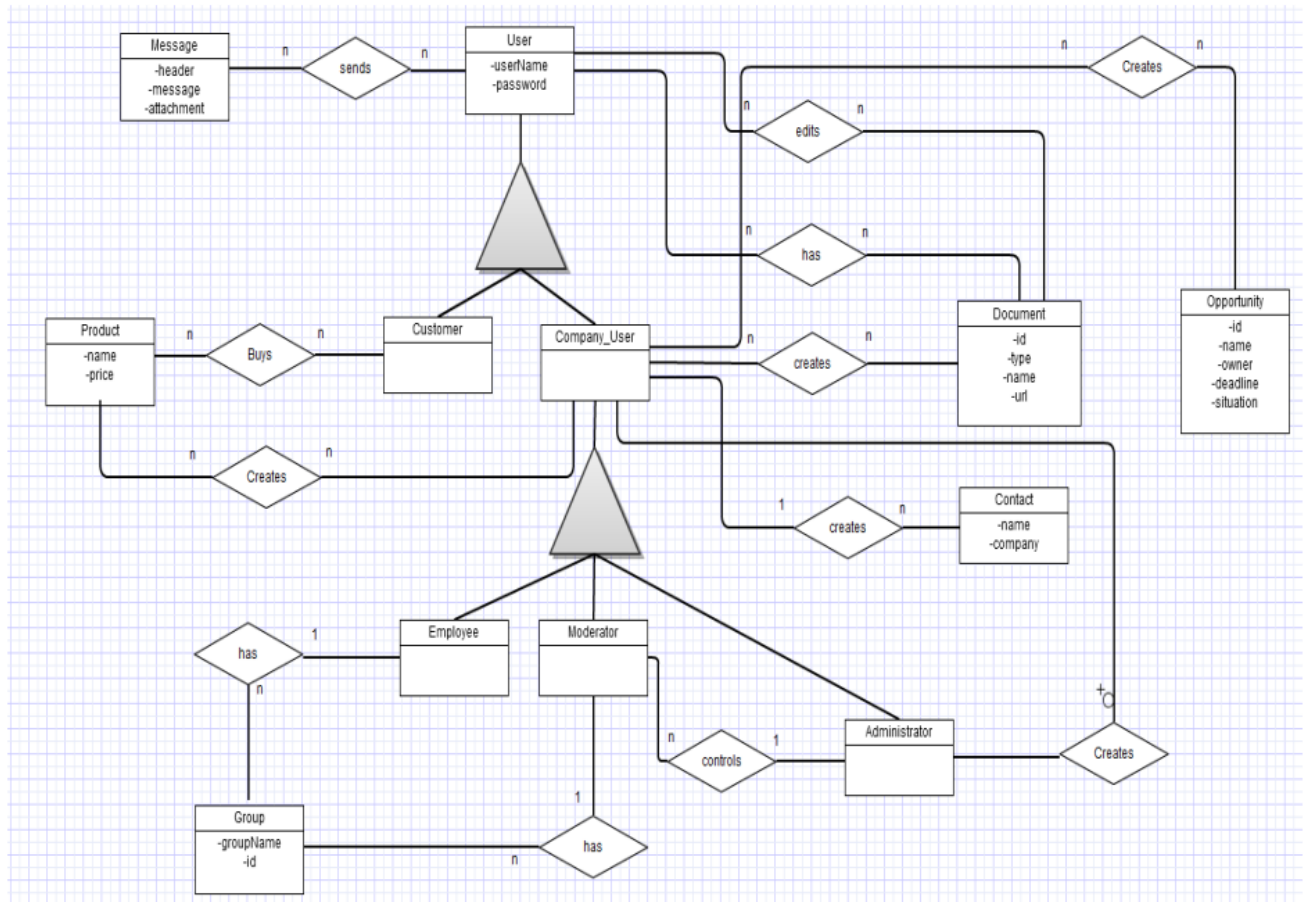
User Interface Services are related only interface. UI changes depending on the user type. Therefore it uses Authorization Manager to change UI according to the user type. It also uses Business Logic to show business related context in UI. Business Logic plays a vital role. Therefore, it uses forecast manager to evaluate data for future forecasting. It also uses encryption manager to encrypt data that are instant messaging and emailing. Business logic also uses database. It evaluates the data and provides it to other services. Backup system uses database in order to satisfy crash recovery. Database manager uses transaction manager because there are significant amount of users. To handle users request stable transaction manager is necessary.

3.3 Interface Description



Layered views is used to show allowed to use relationship between the layers. Layer is a collection of the software units and modules.

3.4 Module Interfaces



There are four main user groups in our database. There are Customer, Employee, Moderator and Administrator. However, Employee, Moderator and Administrator are part of the company itself. Therefore, they are inherited from Company User entity. Besides, Company User entity and Customer entity are derived from User entity which holds the common attributes for all users of the system.

- Any user of the system can send messages to other users.
- Customers can buy products.
- Company Users can create Products.
- Employees are part of Group.
- Moderators own single Group.
- Moderators are controlled by Administrator.
- Administrator can create other Company Users.
- Company Users of the system can create Documents.
- Company Users can create Opportunities.
- Users have Documents associated with them and they can edit these documents.

These are the relations in our system. Type of the relationships such as one to many, many to many can be seen on the figure itself.

3.5 User Interfaces (GUI)

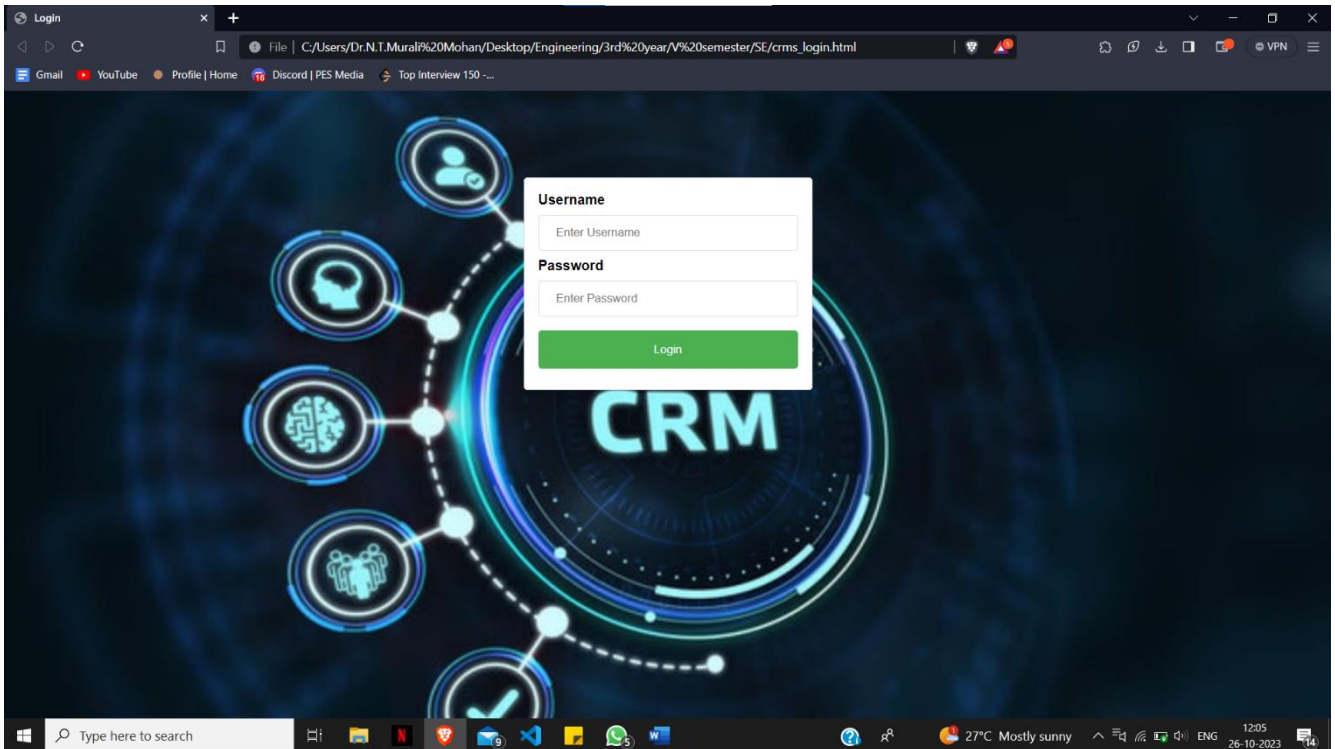


Figure 1 - Login Page

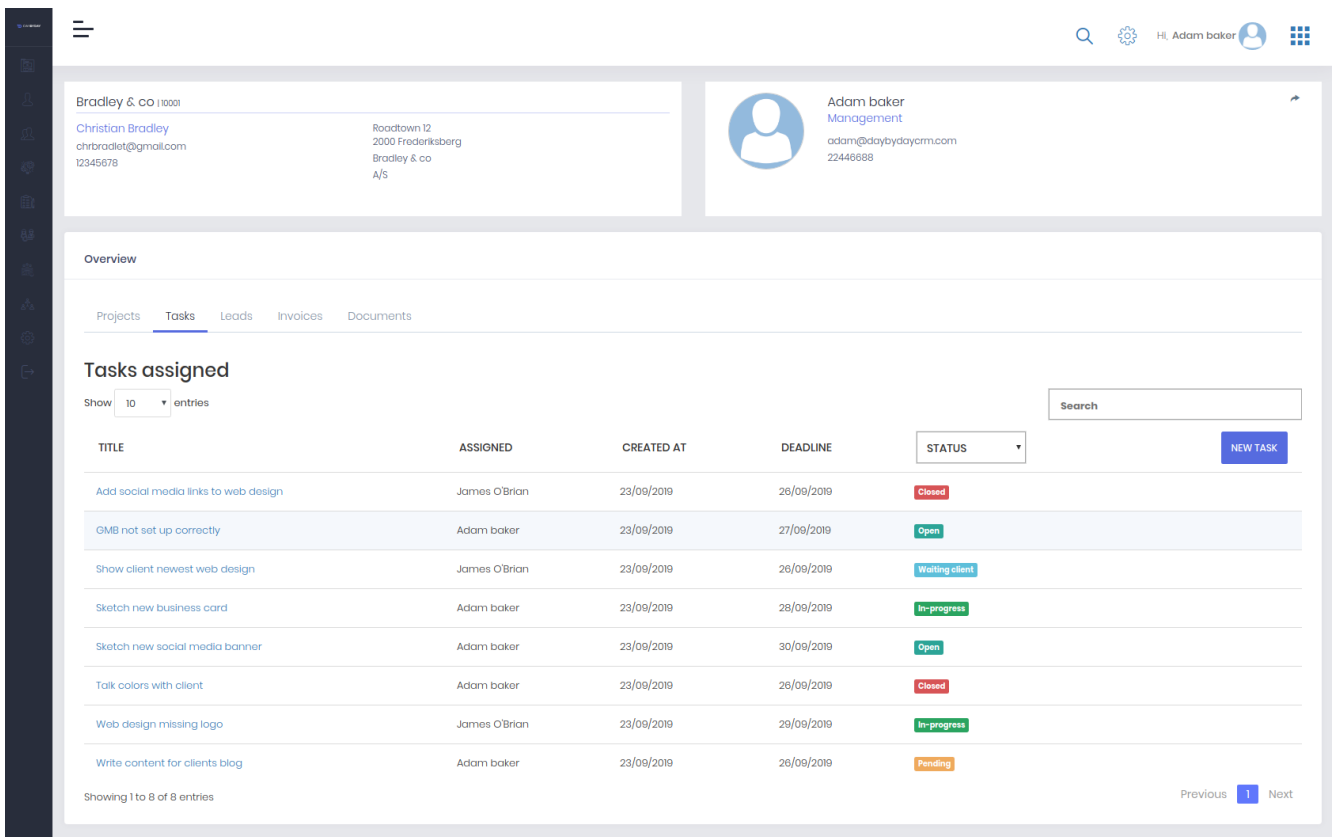
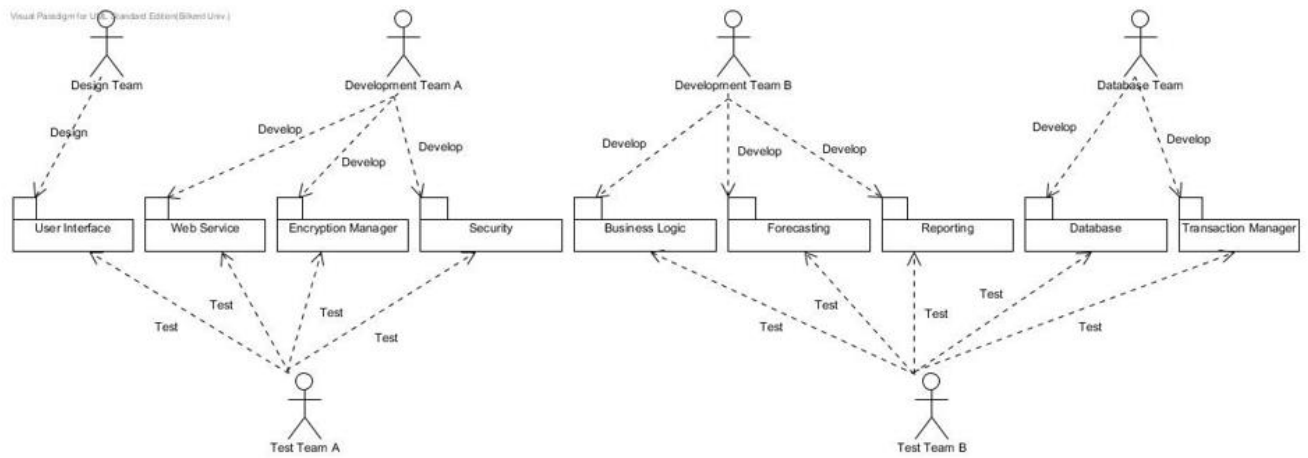


Figure 2 – User dashboard

4. Detailed Design

4.1 Module Detailed Design



4.2 Data Detailed Design

4.3 RTM

Requirement-ID	Requirement Description	Design Component	Test-Case #
3.2.1.1	User access to website	Authorization manager	3.1
3.2.1.2	Register a profile	User Profile and Database Manager	3.16