

A
Project Report
on
“**Matricsv**”
At
Sushilaai Web Solutions, Dhule

Submitted By:
Hemanshu Sanjay Mahajan



**Institute of Management Research and
Development, Shirpur**
KBC North Maharashtra University, Jalgaon

Guided By:
Prof. Sapana Yeshi.

In the partial fulfillment of the requirement for the award of
the degree of ‘ Integrated Master of Computer Application’

2024-25



R. C. Patel Educational Trust's

R. C. Patel Institute of Management Research & Development

Shirpur, Dist-Dhule 425405

CERTIFICATE

*This is to certify that Mr. Hemanshu Sanjay Mahajan, a final year student of 'Integrated Master of Computer Application' from Institute of Management Research & Development, Shirpur has successfully completed the project entitled "**Matrixsv**" as a part of academic six month industrial training which is approved for degree of Master of Computer Application a post graduate course of '**KBC North Maharashtra University, Jalgaon**' during academic year 2024-25.*

Director
RCPET'S IMRD,
Shirpur

Examiner



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Hemanshu S. Mahajan

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Chapter 1

Introduction

1.1 Company Profile

Sushilaai Web Solutions, provides a comprehensive range of media services and solutions. The company operates in various sectors including web development, graphic designing, internet marketing, and more. We are committed to delivering high-quality and cost-effective software development solutions to our clients, ensuring timely delivery and exceeding customer expectations.

Our mission is to enhance customer satisfaction by offering reliable software development services through a team of experienced professionals who have earned the trust and confidence of our clients.

1.1.1 Services Offered

Web Development

Sushilaai Web Solutions has been offering website development services for the past two years, building a solid presence in the digital industry. We specialize in creating custom websites using technologies like .NET, Java, and Python. Our mission is to deliver innovative, fast, and reliable web solutions that help businesses optimize their operations. Serving clients across India and abroad, we focus on delivering creative, high-performance websites tailored to meet unique business needs.

Web Hosting

The important and most overlooked aspect of site development is hosting. We offer reliable, secure and super-fast hosting services. One of the most important things to consider when choosing a good Web hosting company is uptime, and we managed to get our hosting uptime at 99.9. We offer many hosting plans for small businesses. We offer all time support for web hosting.

Software Development

Sushilaai Web Solutions believes that software development is more than just coding and project delivery. It begins with a clear understanding of client requirements and business objectives. Based on this understanding, we recommend cost-effective and impactful solutions that align with our clients' goals. By combining strategic insights with the right mix of technologies, Sushilaai ensures innovative, high-quality outcomes that drive long-term value and success.

Graphic Designing

Graphic design is one of the key focus areas at Sushilaai Web Solutions. In today's digital world, people are naturally drawn to visually appealing content. Graphic design plays a crucial role in web design by enhancing the overall look and feel of a website. At Sushilaai, we blend creative graphic design with efficient web development to create engaging, user-friendly websites. Modern web development goes beyond code and speed—it demands visual impact, and graphic design is essential in capturing attention and building strong digital presence.

1.2 Introduction To MatricsV

The internship aimed to provide practical experience in the field of web development, with a focus on data visualization. The primary objective of the MatricsV project was to create an interactive, responsive dashboard that could interpret and display complex data through visually intuitive charts and graphs. This project was designed not just as a technical exercise but also as a real-world application of analytical thinking, user interface design, and performance optimization. Data visualization plays a crucial role in modern data analysis, allowing stakeholders to understand trends, patterns, and outliers in datasets. Throughout the project, I worked on various aspects of frontend development, including component-based architecture, charting libraries, data integration, responsive design, and state management.

1.2.1 Need And Motivation

In today's data-driven world, the ability to interpret complex data quickly and accurately is essential for effective decision-making. Organizations generate massive volumes of data daily, making data visualization a critical tool for identifying trends, patterns, and anomalies. However, raw data alone is often overwhelming and lacks clarity without proper visual representation.

The MatricsV project was initiated to address this need by building a responsive, interactive dashboard capable of transforming complex datasets into easily digestible visuals. The motivation behind the project was to bridge the gap between data and decision-making by applying modern frontend technologies to create intuitive user interfaces. This not only enhances user engagement but also supports faster, insight-driven actions in business and academic contexts. By combining performance, usability, and visual appeal, the project aimed to provide a practical, scalable solution to real-world data interpretation challenges.

1.2.2 Problem Definition

Many organizations struggle to extract meaningful insights from large, complex datasets. Traditional tools often lack interactivity and visual clarity, making analysis difficult. The MatricsV project addresses this issue by developing a responsive dashboard that transforms raw data into intuitive visualizations, enabling users to interpret trends, patterns, and outliers easily for better, faster decision-making.

1.2.3 Objective And Scope

This dashboard is designed to make data visualization simple, efficient, and interactive. The main goal is to convert complex datasets into user-friendly charts and graphs for better understanding and analysis.

1. To create an interactive and responsive web dashboard using modern frontend technologies.
2. To visualize data using dynamic charts such as bar, line, and pie charts.
3. To allow filtering and real-time updates based on user inputs.
4. To ensure the system is responsive and accessible across devices.
5. To help users identify trends, patterns, and outliers easily.
6. To integrate external data sources using APIs for dynamic data handling.
7. To optimize performance for smooth interaction, even with large datasets.
8. To provide a scalable structure for potential future expansion in different domains.

1.2.4 Features of Proposed System

Information needs only to be entered once and is available wherever you need it. More importantly, it all works together in the way you would expect, providing a natural workflow to everything you do.

1. Display of interactive dashboards and data visualization
2. Create separate dynamic components for each data category (charts, filters, etc.)
3. Provide real-time updates based on user interactions (filters, dropdowns, date-pickers)
4. Maintain user-friendly and responsive layouts for seamless access across devices

Features:

- **Graphical User Interface:** The MatricsV system is built with a simple, interactive, and user-friendly interface, allowing users to perform tasks easily.
- **Web Based:** The system is entirely web-based, making it platform-independent and accessible from any location.
- **Multi User:** Multiple users can access and interact with the dashboard, with a structure in place for managing and restricting user roles (using future extensions).
- **Dynamic Reports:** MatricsV provides dynamic visualization through different types of charts (bar, line, pie) for easy understanding and faster decision-making.
- **Flexible Reports (Daily, Monthly, Quarterly, Half-Yearly, Yearly):** Different visual reports and data breakdowns can be generated based on user-selected time periods and filters.

Chapter 2

System Requirement Analysis

2.1 System Requirement Analysis

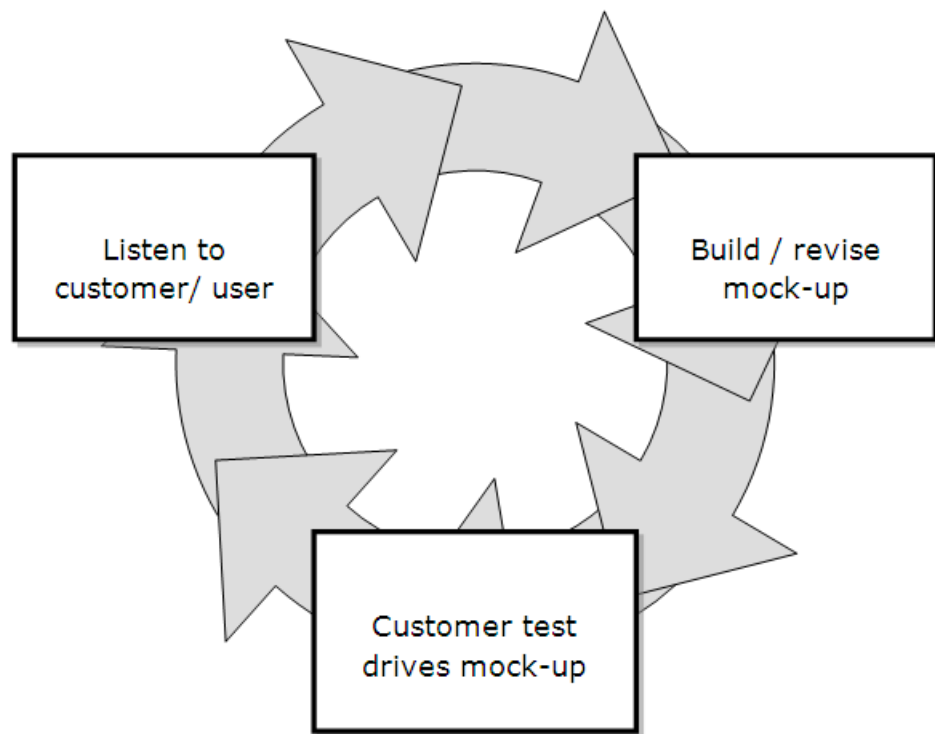
At system requirement analysis stage the information gathering process is identified
a.....

2.2 Software Process and Development

The set of general objectives for "Pharma Sales Force Automation" development
were defined by the various

Prototype model

The prototyping paradigm begins with requirements gathering. Together with
Panning of those aspects of the software that will be visible to the customer/user
(e.g. input approaches and output formats).



2.3 Scope of Proposed System

While in this phase, the scope of em was defined first and then what needs to be done was finalized. Lot of brainstorming ws were very clearly noted down. We never came back to revise or change the requirement defined earlier.....

Advantages of Proposed System

2.4 Technical Specification

- **Server**

Processor : Pentium 3

RAM : Min. 512MB

Hard Disk : Min. 480 MB free

- **Client**

Chapter 3

Feasibility Study

3.1 Introduction

the working of the system,

Therefore, a feasibility study of the proposed system needs to be carried out in order to:

- Provide a better understanding of the System.
- Describe the outputs.

There are many factors. These factors are **Economical Feasibility, Technical Feasibility and Operational Feasibility**.

3.2 Economical Feasibility

Need not pay any hence the system is economically feasible.

3.3 Operational Feasibility

company will benefit from the system and hence the system is operationally feasible.

3.4 Financial and Economical Feasibility

The economic analysis is the most used.....

Chapter 4

Proposed System

4.1 Proposed System

helps to manage critical processes in Hospital.

Patient Registration: It provides scheduling/Canceling/Rescheduling of appointments appointment schedule of doctors.

My Assistant: My Assistant as a utility performs the role of a personal assistant., It stores information .

4.2 User Privileges

The user type determines the privileges that the user has within EHMS.

4.3 Objective of the System

- Latest technology
- Graphical user Interface

Chapter 5

Preliminary Design

5.1 Tools of data flow strategy

Data flow strategy shows th and their interactions.....

Data flow analysis makes use of the following tools:

Flow Charts

Data Flow Diagrams

Data Dictionary

Flowchart

Flowchart is used to represent the algorithm

Data Dictionary

The logical characteristics of current systems data stores, including name, description, aliases, contents,

Data Structure Diagrams

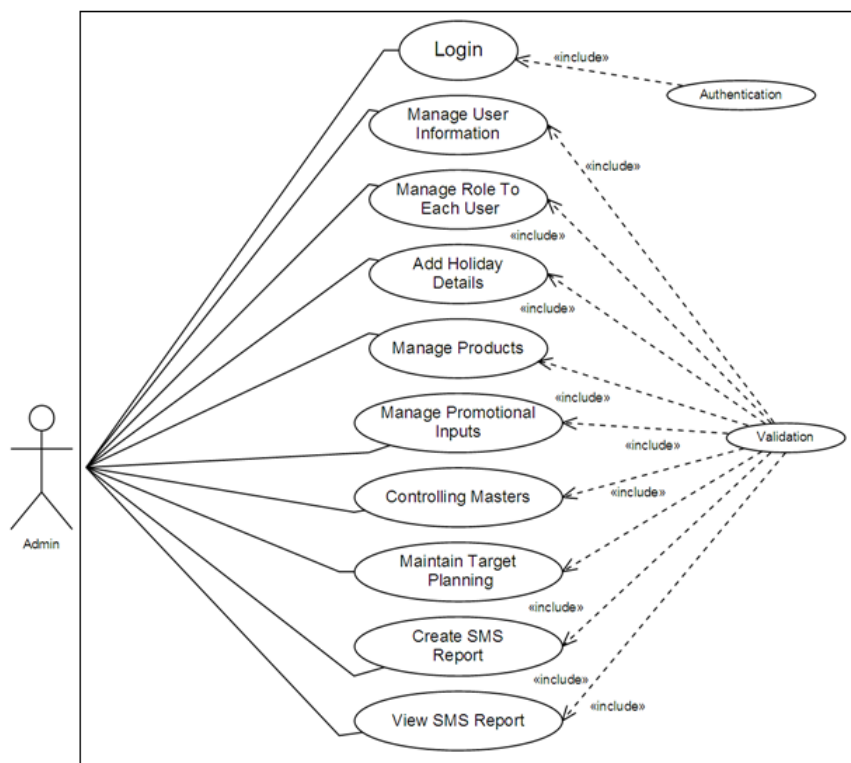
A pictorial description of the relation between entities (people, places, events and things) in system and the set of information about the entity,

Structured Chart

A design tool that pictorially shows the relation between processing modules in computer software, describes

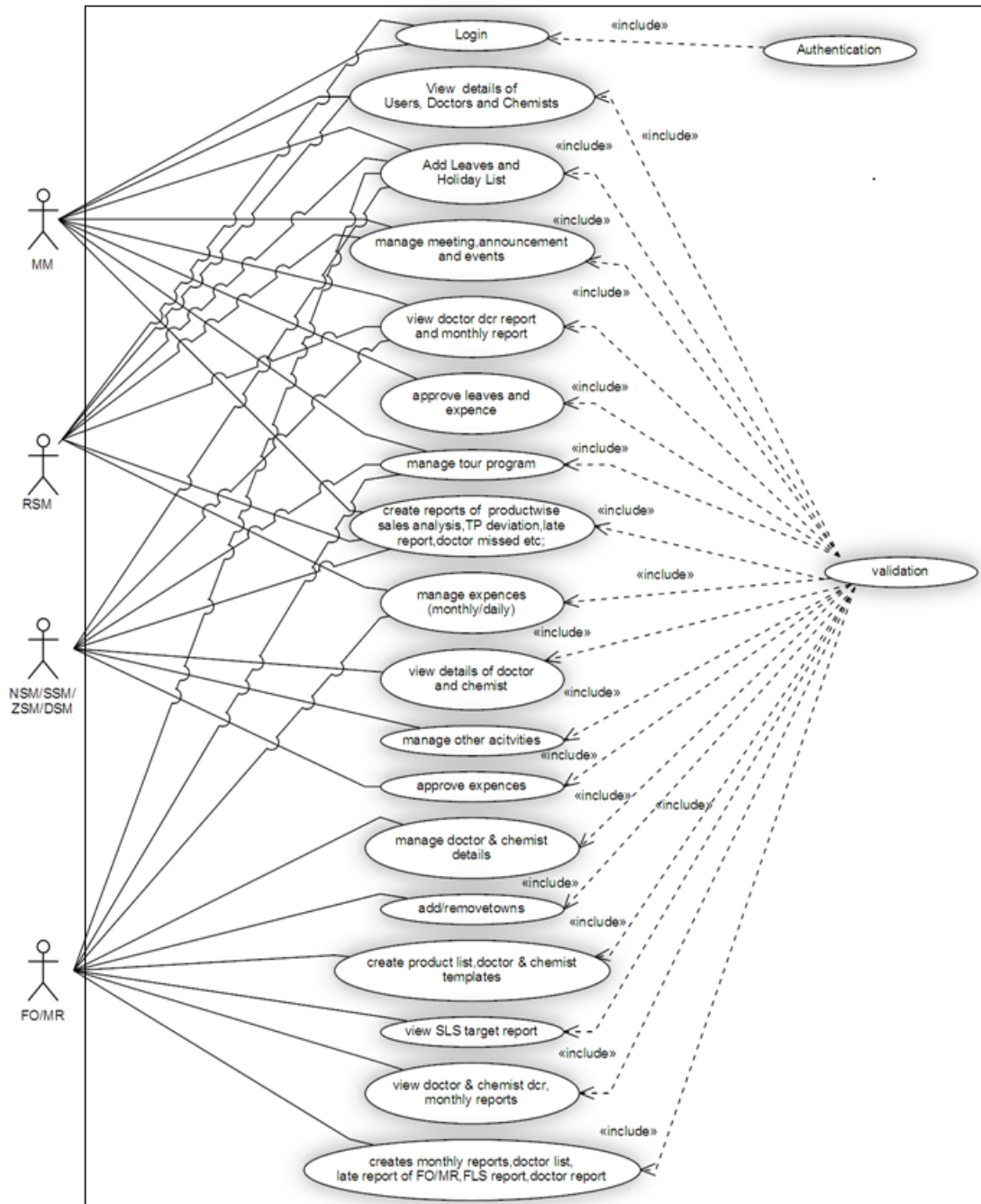
5.2 Use Case Diagram

Usecase Diagram For Admin



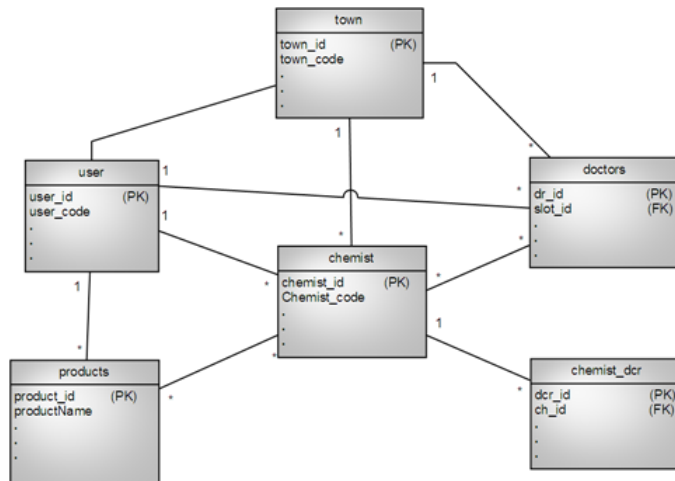
Usecase Diagram For Admin

Usecase Diagram For Other Users.

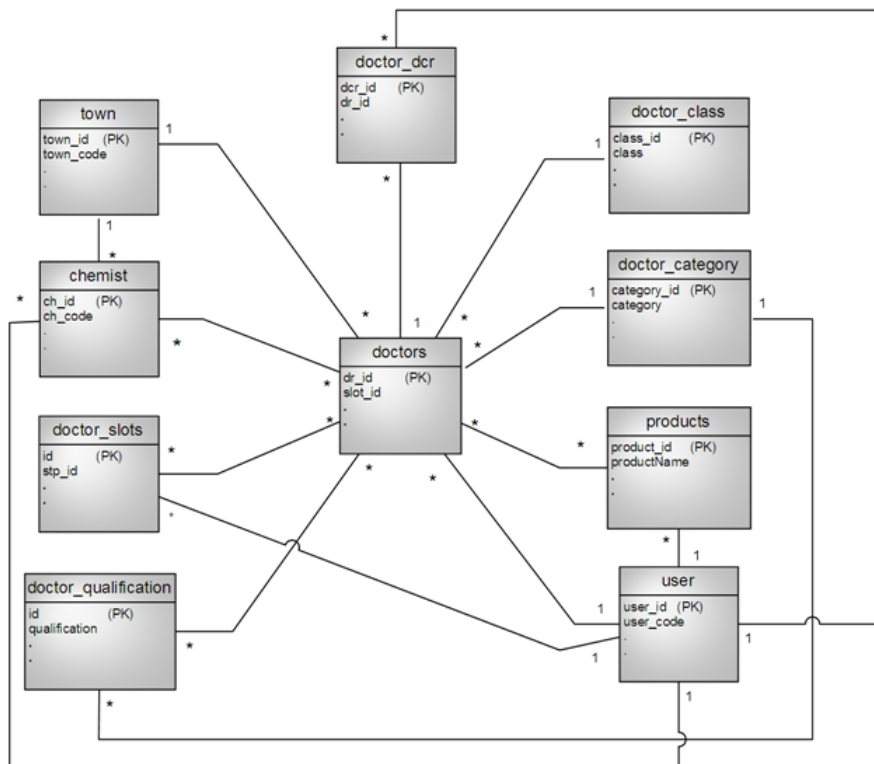


5.3 Entity Relationship Diagram

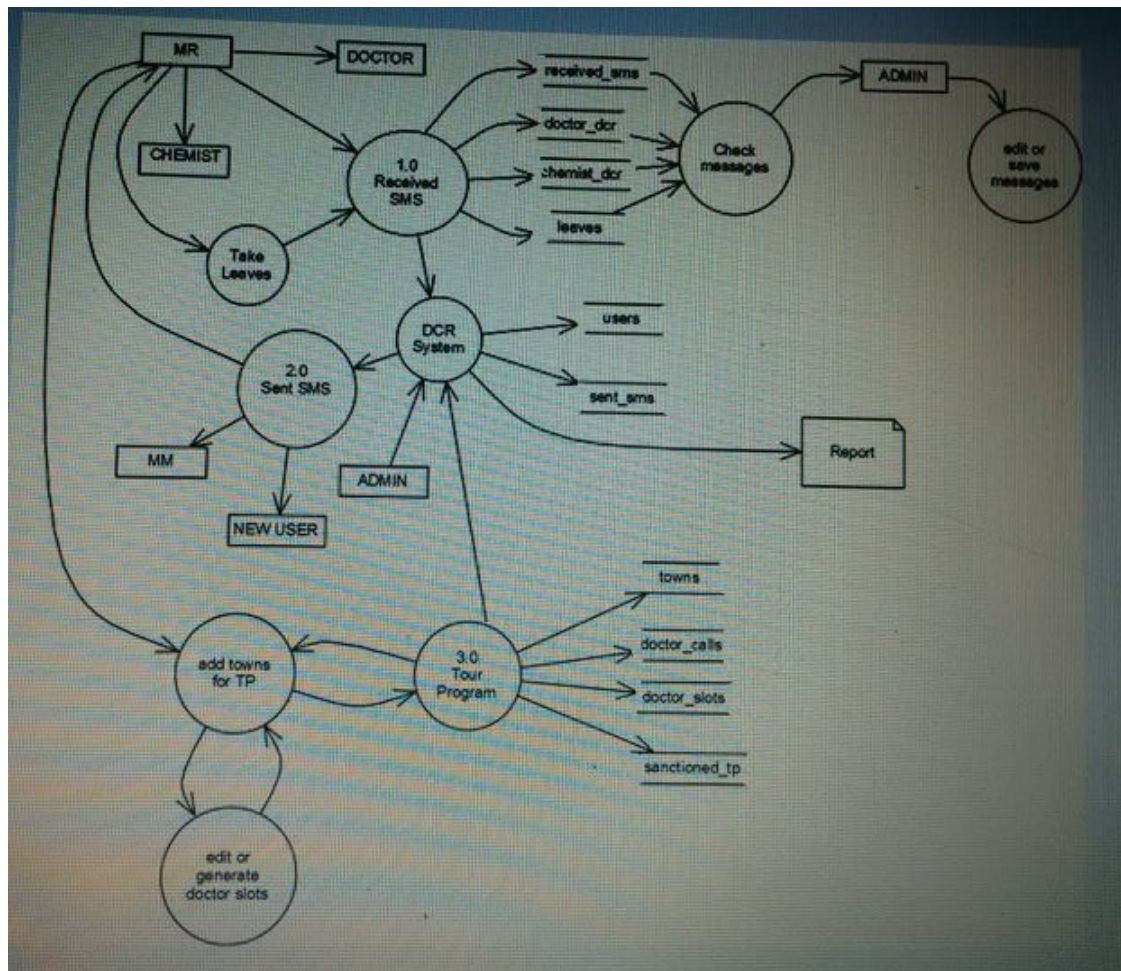
ERD For Chemist.



ERD For doctor.



5.4 Data Flow Diagram



Chapter 6

Detailed Design

Simply functionality and availability, is selected based on the relative important of these criteria.....

6.1 Data Dictionary

Data dictionary is only collection of data element definition. Entries in a data dictionary include the name of the data item and attributes.

6.2 Input and output Design

Considering all o the interaction of user with the system be in most effective and simplified way. All the input forms are designed in she user will be able to use them in very eff possibilities needed by the user.....

6.2.1 Admin

login

Login | dcr24

ph.local/login/logout

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Kitemark Healthcare

Kitemark Healthcare started in 1997 at Palghar. It has vast range of products and they are marketed entirely all over through Maharashtra. Kitemark Healthcare is operated from Palghar as well as Jalgaon branch office.

Thinking on humanitarian ground and society's health and society's care Kitemark Healthcare has designed their products. Its product range includes viz. gynecological, orthopedicals, nutraceuticals, anti-ulcerates, antibiotics, nutritionals, haematinics, analgesics, cough preparations etc. And today these products range proved the position of Kitemark Healthcare as suitable to its name and it has achieved zenith position in the sky.

Achievement to this position of Kitemark Healthcare is contributed by its star products such as **Dermol-3**, **Actyl gel**, **Oracain gel** etc. Along with this Kitemark Healthcare has always showed changes in their product range according to current scenario and on that basis it has launched new generation product range such as **Kite-369** which is Omega 3,6 & 9 fatty acid for cardiac treatment, improve in immunity and many more indications while **Zincal K2 forte** (Calcium with zinc and Vitamin K2-7) specifically for osteoporosis.

dcr24

Login

admin

☐ Remember Me

[Forgot password?](#)

Powered By: **Synap Info System** Developed By: **Siddhi Software Solutions**

Admin Dashboard

Dashboard | Kitemark Healthcare

ph.local/dashboard

Most Visited Getting Started Suggested Sites Web Slice Gallery

Kitemark Healthcare

Hello Kitemark Admin | Administrator | Logout

Dashboard Approvals Reports Help

Users

View

Add

Bulk Upload

Role Management

Products

Gifts

Promotional Inputs

Masters

Settings

Target Planning

Announcements

Meetings

Download User's Manual

Events

Gift Dispatched

Others

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View Users

Dashboard | Kitemark Healthcare

ph.local/users

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Kitemark Healthcare

Hello Kitemark Admin | Administrator | Logout

Dashboard Approvals Reports Help

Users

View Add Bulk Upload

Role Management Products Gifts Promotional Inputs Masters Settings Target Planning

Users

Show 10 entries

Search:

| Username | Full Name | Designation | Location | MobileNo | Actions |
|----------|---------------------|------------------------|------------|------------|--|
| KM1341 | G P PAGARE | Marketing Manager | - | 9049995254 | Edit View In-Activate ResetPassword Delete |
| KM1342 | NARESH TAXNE | Regional Sales Manager | JALGAON | 9049995273 | Edit View In-Activate ResetPassword Delete |
| KM1343 | MADAN MORANKAR | Medical Representative | JALGAON | 9049995263 | Edit View In-Activate ResetPassword Delete |
| KM1344 | SAMIR DESHPANDE | Regional Sales Manager | AMRAVATI | 9049995264 | Edit View In-Activate ResetPassword Delete |
| KM1345 | SANTOSH PAWAR | Regional Sales Manager | AHMEDNAGAR | 9049995279 | Edit View In-Activate ResetPassword Delete |
| KM1346 | VISHAL B KSHIRSAGAR | Medical Representative | SANGAMNER | 888878778 | Edit View In-Activate ResetPassword Delete |
| KM1347 | DATTATRAY S GADADE | Medical Representative | A NAGAR | 9049995266 | Edit View In-Activate ResetPassword Delete |
| KM1348 | SUNIL P PAGARE | Field Officer | DHULE | 9049995259 | Edit View In-Activate ResetPassword Delete |
| KM1349 | RAJENDRA N DHERE | Medical Representative | A NAGAR I | 9763634041 | Edit View In-Activate ResetPassword Delete |
| KM1350 | AMOL DEOKATE | Medical Representative | BARAMATI | 9657885500 | Edit View In-Activate ResetPassword Delete |

Showing 1 to 10 of 19 entries

Copyright . All Rights Reserved.

Add User

Dashboard | Kitemark Healthcare

ph.local/users/adduser

Most Visited Getting Started Suggested Sites Web Slice Gallery

Kitemark Healthcare

Hello Kitemark Admin | Administrator | Logout

Dashboard Approvals Reports Help

Users

View Add Bulk Upload

Role Management Products Gifts Promotional Inputs Masters Settings Target Planning

Add User

Full Name :* Baliram Patil

Designation :* Marketing Manager

Address :* At-Karmad Jal Jangner Dist-Jalgaon

Phone : 02580220669

Mobile :* 8007431475

E-Mail :* balirampatil1688@gmail.com

Allowances :*

In-Station 100

Out-Station 150

Ex-Station 200

Add

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6.3 Database structure

announcement: This table stores announcement added by Admin and useful to display announcement to other users.

| Field Name | Data Type | size | Constraints |
|-------------|-----------|------|----------------------------|
| announceid | int | 20 | Primary Key,auto_increment |
| title | varchar | 200 | NOT NULL. |
| description | varchar | 255 | NOT NULL. |
| addedBy | int | 11 | NOT NULL |
| addedon | datetime | - | NOT NULL. |
| updatedon | datetime | - | NOT NULL. |
| expiry_date | date | 20 | NOT NULL. |
| status | varchar | - | NOT NULL. |

Table 6.1: announcement

area: This table stores area details with region of that area.

| Field Name | Data Type | size | Constraints |
|------------|-----------|------|----------------------------|
| area_id | bigint | 20 | Primary Key,auto_increment |
| area | varchar | 25 | NOT NULL |
| region_id | bigint | 20 | NOT NULL |
| isActive | int | 11 | NOTNULL |
| addedon | datetime | - | NOT NULL |
| updatedon | datetime | - | NOT NULL |

Table 6.2: area

chemist: This table stores all chemist details added by Medical Representative or Field Officer.

| Field Name | Data Type | size | Constraints |
|----------------------|-----------|------|----------------------------|
| chemist_id | bigint | 20 | Primary Key,auto_increment |
| chemist_code | bigint | 20 | NOT NULL |
| store_name | varchar | 100 | NOT NULL |
| store_address | Text | - | NOT NULL |
| town_id | bigint | 20 | NOT NULL |
| contact_person | varchar | 100 | NOT NULL |
| mobile | varchar | 12 | NOT NULL |
| email | varchar | 100 | NOT NULL |
| dob | date | - | NOT NULL |
| date_of_marriage | date | - | NOT NULL |
| is_hospital_attached | tinyint | 2 | NOT NULL |
| hospital_name | varchar | 100 | NOT NULL |
| dr_of_hospital | varchar | 100 | NOT NULL |
| near_by_dr | varchar | 100 | NOT NULL |
| available_products | varchar | 150 | NOT NULL |
| monthly_purchase | bigint | 20 | NOT NULL |
| status | varchar | 20 | NOT NULL |
| approved_by | varchar | 25 | NOT NULL |
| reject_reason | varchar | 200 | NOT NULL |
| added_by | bigint | 20 | NOT NULL |
| added_on | datetime | - | NOT NULL |
| updated_by | bigint | 20 | NOT NULL |
| updated_on | datetime | - | NOT NULL |
| isActive | tinyint | 2 | NOT NULL |

Table 6.3: chemist

target_product_sale This table stores the target of product sales .

target_prod_calculations This table stores the product wise target calculation.

target_sls This table stores the target of sls.

| Field Name | Data Type | size | Constraints |
|------------|-----------|------|----------------------------|
| id | bigint | 20 | Primary Key,auto_increment |
| year | int | 11 | NOT NULL |
| hq_id | int | 11 | NOT NULL |
| prod_id | bigint | 20 | NOT NULL |
| sale | double | - | NOT NULL |
| added_by | bigint | 20 | NOT NULL |
| added_on | datetime | - | NOT NULL |
| updated_by | bigint | 20 | NOT NULL |
| updated_on | datetime | - | NOT NULL |

Table 6.4: target_product_sale

| Field Name | Data Type | size | Constraints |
|-----------------|-----------|------|----------------------------|
| id | bigint | 20 | Primary Key,auto_increment |
| year | int | 11 | NOT NULL |
| prod_id | bigint | 20 | NOT NULL |
| packing | varchar | 100 | NOT NULL |
| calc_value | double | - | NOT NULL |
| expected_growth | double | - | NOT NULL |
| min1 | double | - | NOT NULL |
| min2 | double | - | NOT NULL |
| min3 | double | - | NOT NULL |
| added_by | bigint | 20 | NOT NULL |
| added_on | datetime | - | NOT NULL |
| updated_by | bigint | 20 | NOT NULL |
| updated_on | datetime | - | NOT NULL |

Table 6.5: target_prod_calculations

| Field Name | Data Type | size | Constraints |
|---------------|-----------|------|----------------------------|
| id | int | 11 | Primary Key,auto_increment |
| month | text | | NOT NULL |
| hq_id | int | 11 | NOT NULL |
| product_id | int | 11 | NOT NULL |
| sls | bigint | 20 | NOT NULL |
| closing_stock | bigint | 20 | NOT NULL |
| added_by | bigint | 20 | NOT NULL |
| added_on | datetime | - | NOT NULL |
| updated_by | bigint | 20 | NOT NULL |
| updated_on | datetime | - | NOT NULL |
| monthno | int | 11 | NOT NULL |
| year | int | 11 | NOT NULL |

Table 6.6: target_sls

target_yearly This table stores the yearly target.

| Field Name | Data Type | size | Constraints |
|---------------|-----------|------|----------------------------|
| id | int | 11 | Primary Key,auto_increment |
| year | text | | NOT NULL |
| hq_id | int | 11 | NOT NULL |
| product_id | int | 11 | NOT NULL |
| annual_target | bigint | 20 | NOT NULL |
| target_value | bigint | 20 | NOT NULL |
| intro_month | text | - | NOT NULL |
| added_by | bigint | 20 | NOT NULL |
| added_on | datetime | - | NOT NULL |
| updated_by | bigint | 20 | NOT NULL |
| updated_on | datetime | - | NOT NULL |

Table 6.7: target_yearly

town This table stores the town details.

| Field Name | Data Type | size | Constraints |
|---------------|-----------|------|----------------------------|
| town_id | bigint | 20 | Primary Key,auto_increment |
| town_code | bigint | 20 | NOT NULL |
| town | varchar | 25 | NOT NULL |
| hq_id | bigint | 20 | NOT NULL |
| isActive | tinyint | 11 | NOT NULL |
| status | varchar | 20 | NOT NULL |
| approved_by | varchar | 25 | NOT NULL |
| reject_reason | varchar | 200 | NOT NULL |
| added_by | bigint | 20 | NOT NULL |
| added_on | datetime | - | NOT NULL |
| updated_by | bigint | 20 | NOT NULL |
| updated_on | datetime | - | NOT NULL |

Table 6.8: town

users This table stores the users details.

users_leave This table stores the userwise leave details.

users_profile This table stores the user profiles details.

| Field Name | Data Type | size | Constraints |
|----------------|-----------|------|----------------------------|
| id | int | 11 | Primary Key,auto_increment |
| company_code | varchar | 3 | NOT NULL |
| username | varchar | 25 | NOT NULL |
| password | varchar | 25 | NOT NULL |
| fullname | varchar | 50 | NOT NULL |
| role_id | int | 11 | NOT NULL |
| reports_to | int | 11 | NOT NULL |
| address | varchar | 50 | NOT NULL |
| phone | varchar | 25 | NOT NULL |
| mobile | varchar | 10 | NOT NULL |
| email | varchar | 50 | NOT NULL |
| nation_id | int | 20 | NOT NULL |
| zone_id | bigint | 20 | NOT NULL |
| state_id | bigint | 20 | NOT NULL |
| division_id | bigint | 20 | NOT NULL |
| region_id | bigint | 20 | NOT NULL |
| area_id | bigint | 20 | NOT NULL |
| headQuarter_id | bigint | 20 | NOT NULL |
| based_on | varchar | 50 | NOT NULL |
| addedBy | bigint | 20 | NOT NULL |
| addedOn | datetime | - | NOT NULL |
| updatedOn | datetime | - | NOT NULL |
| isActive | tinyint | 1 | NOT NULL |
| instation | int | 11 | NOT NULL |
| outstation | int | 11 | NOT NULL |
| exstation | int | 11 | NOT NULL |

Table 6.9: users

| Field Name | Data Type | size | Constraints |
|------------|-----------|------|----------------------------|
| user_id | int | 11 | Primary Key,auto_increment |
| holiday_id | int | 11 | NOT NULL |
| date | date | - | NOT NULL |

Table 6.10: users_leaves

| Field Name | Data Type | size | Constraints |
|--------------|-----------|------|----------------------------|
| profile_id | int | 11 | Primary Key,auto_increment |
| profile_name | varchar | 50 | NOT NULL |
| discription | varchar | 200 | NOT NULL |

Table 6.11: users_profile

user_roles This table stores the user roles details.

| Field Name | Data Type | size | Constraints |
|-------------|-----------|------|----------------------------|
| role_id | int | 11 | Primary Key,auto_increment |
| profile_id | varchar | 3 | NOT NULL |
| parent_id | varchar | 25 | NOT NULL |
| designation | varchar | 25 | NOT NULL |
| permission | varchar | 50 | NOT NULL |
| isActive | int | 11 | NOT NULL |
| added_by | bigint | 20 | NOT NULL |
| added_on | datetime | - | NOT NULL |
| updated_by | bigint | 20 | NOT NULL |
| updated_on | datetime | - | NOT NULL |

Table 6.12: users_roles

zones This table stores the zones details.

| Field Name | Data Type | size | Constraints |
|------------|-----------|------|----------------------------|
| zone_id | bigint | 20 | Primary Key,auto_increment |
| title | varchar | 25 | NOT NULL |
| nation_id | int | 11 | NOT NULL |
| isActive | int | 11 | NOT NULL |
| addedOn | datetime | - | NOT NULL |

Table 6.13: zones

Chapter 7

Testing

7.1 Introduction

Testing is a process of executing error. A good test is the

The increasing a software failure are motivating forces for well planned, through testing.....

7.2 White Box Testing

This testing reveals the internal working of the code i.e. each of the programming elements is exercised properly. This type of.....

7.3 Black Box Testing

In this type of testing,

7.4 Validation Testing

Valid data must be in output i.e. report. For this checks are entry screen.....

7.5 GUI Testing

The criterion of the user interface is graphical which less time consuming for user but more complexes for the programmer.

Chapter 8

Concluding Remarks

8.1 Strengths of System

1. System is easy to use....
2. System has a user friendly GUI...

8.2 Limitations of system

- 1. The only limitation of the system is that the system is not fully automated....
- 2. The limited scope of current System doesn't fully encompass the current system.....

8.3 Scope for future development

Any software product developed has so til it is designed to satisfy all the existing as well as the future needs. This project is not an....

8.4 Conclusion

- Pharma Sales Force Automation (PsfA) is the product whir planning and provide more time for work tal organizations....
- The main motive of learning and acquiring the skills has also been achieved.
 - o Way of analyzing the system.
 - o Importance and skill of proper database design.
 - o Proper use of state management tools.
- Company too is satisfied with the quality of work.

Appendix

References

[1] Books Referred,

Following books proved to be very helpful during the development of the system.

- CodeIgnitor for Rapid PHP Application Developement

David Upton

- Software Engineering: A Practitioner's Approach, Seventh Edition Roger S. Pressman

[2] WebSites Visited :-

Following websites proved to be very helpful during the development of the system.

- www.msdn.microsoft.com
- www.w3schools.com
- www.codeproject.com

[3] Software Used for Diagrams

- Pacestar UML Diagrammer 6

[4] Software Engineering a Practitioner's Approach. (McGraw Hill Publication)
Roger S. Pressman.