Project Documentation

Title: - Quotation Generation System

Digital Internship Program 2022 Exavalu

By Group C

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INTRODUCTION

Quotation Generation System (QGS) Software includes designing and automating the client's Quotation. QGS aims to improve client's business efficiency in creating and generating quotations, emailing quotations, maintain billing and shipping information and providing enhanced QGS reporting features

- Quotation Generation System incorporates planning, designing and automating the customer’s Quotation

- QGS encapsulates customer enquiries by reducing the standard time required to organize customers’ quotations, maintain the track of enquiries efficiently

- A quotation is a document that a seller provides to a buyer to offer goods or services at a stated price, under specified conditions

Key Points:

1. Quality Policy and Objectives
2. Organizational Structure and Responsibilities
3. Customer Satisfaction with Product Quality
4. Enterprise Quality Generation
5. Status-tracking of all quotations using customized reports simplifying the workflow
6. Integration with other application for easy and fast sharing of contents and data
7. Attaching supporting documents to a quotation which can be either for external or internal use

8. Managing all your quotation records in one user-interface friendly system with the necessary standards of tracking

OBJECTIVES

The goal of a good Quotation Generation Software is to increase your sales team's productivity through automation of quotations and efficient organization of the quotation process workflow. A Quotation Generation software allows you to generate error-free quotations, by automatically filling out the right client's name and product related details in the right format. This eliminates errors that could arise out of manual entry. A good Quotation Management software helps you keep your client and product information organized and available in real time. This helps in cataloging your products effectively and engage more productively with clients.

Modules and Functionalities:

1. Admin
2. Dealer
3. Company
4. Products
5. Orders
6. Quotations

- Add enquiry, assign, and generate quotation / proforma invoice and sale order
- Real-time updating of sales activity in Dashboard for easy reference and planning

- Create (categorization) Product groups, Product Sub-groups, and products with customised specifications
- Predefined roles give specific users exclusive views of sales activity and order pipeline
- Receive enquiry, create, deliver, manage and submit your Quotation through a user-friendly interface
- Assign ownership of enquiries and track follow-up until sales is achieved. Generate quotation with common discount, without discount and with item wise discount. Fix discount by Percentage or Value
- Easy access to previous orders, product price and discount offered to each customer
- Complete control on current flow of orders and its status
- Alert actions
- Update order details and generate performance report by executive, team, and product wise

BENEFITS OF QUOTATION GENERATION

A good Quotation Management software helps you keep your client and product information organized and available in real time. This helps in cataloging your products effectively and engage more productively with clients.

By consolidating all the data in a unified database, the quotation management software contributes to your CRM and feeds it with relevant and up-to-date information.

Another vital benefit that a Quotation Management Software brings to the table is consistency in sales operations. By ensuring consistent pricing and discounting and reflecting a consistent brand image in the quotations, quotation management software ensures that the company's functions are reflected as unified and reliable

- **Enquiries Tracker**

  Enquiry status tracker - user-wise & branch-wise.

  Historical data of past quotations - product-wise, with comparative analysis

  to enable competitive and strategic bidding / pricing in future.

  Dealer interests, new members.

- **Analytics**

  Analysis of lost orders and enquiries requiring follow up.

  Successful order receipt analysis.

  Profitability analysis (customized at additional fee).

  Adding new trending products according to order demand.

- **Discounts & feasibility**

  Discounts to be provided according to products ordered and festive offers.

  Product market reach and dealer approach.

  Profitability analysis (customized at additional fee).

  Bringing new temptation for newly arrived products.

- **Invoices & Payments**

  Proforma invoice generation.

  Final price quotations with facilities for revision after volume discounts.

  Facility for application of taxes (VAT / Service Tax / LBT /…).

  Delivery details and associated challans and packing slips.

  Non-editable Invoices in PDF / other formats to enable email attachment send-outs.

- **Sales Personnel Performance & Expenses**

  Sales executive daily / weekly reports with expenses statements, incentives / commissions, performance / fulfilling of targets and other supplementary information, facilitating corrective Generation quotes.

  Alert messages to related persons in form of 'pop-ups' (customized at additional fee).

THEORETICAL PLATFORMS

Required platforms for the project build:

1. **NETBEANS:** Apache NetBeans is much more than a text editor. It highlights source code syntactically and semantically, lets you easily refactor code, with a range of handy and powerful tools. Apache NetBeans can be installed on all operating systems that support Java, i.e., Windows, Linux, Mac OSX and BSD. Write Once, Run Anywhere, applies to NetBeans too.

2. **DATABASE:** MySQL is a relational database management system (RDBMS) developed by Oracle that is based on structured query language (SQL). ... MySQL is integral to many of the most popular software stacks for building and maintaining everything from customer-facing web applications to powerful, data-driven B2B services.

3. **HTML:** The Hypertext Markup Language, or HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

4. **CSS:** Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML.CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.
5. **JSP:** JSP technology is used to create web application just like Servlet technology. It can be thought of as an extension to Servlet because it provides more functionality than servlet such as expression language, JSTL, etc.

6. **JS:** JavaScript is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. Over 97% of websites use JavaScript on the client side for web page behavior, often incorporating third-party libraries. All major web browsers have a dedicated JavaScript engine to execute the code on users' devices.

7. **JQUERY:** jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers. With a combination of versatility and extensibility, jQuery has changed the way that millions of people write JavaScript.

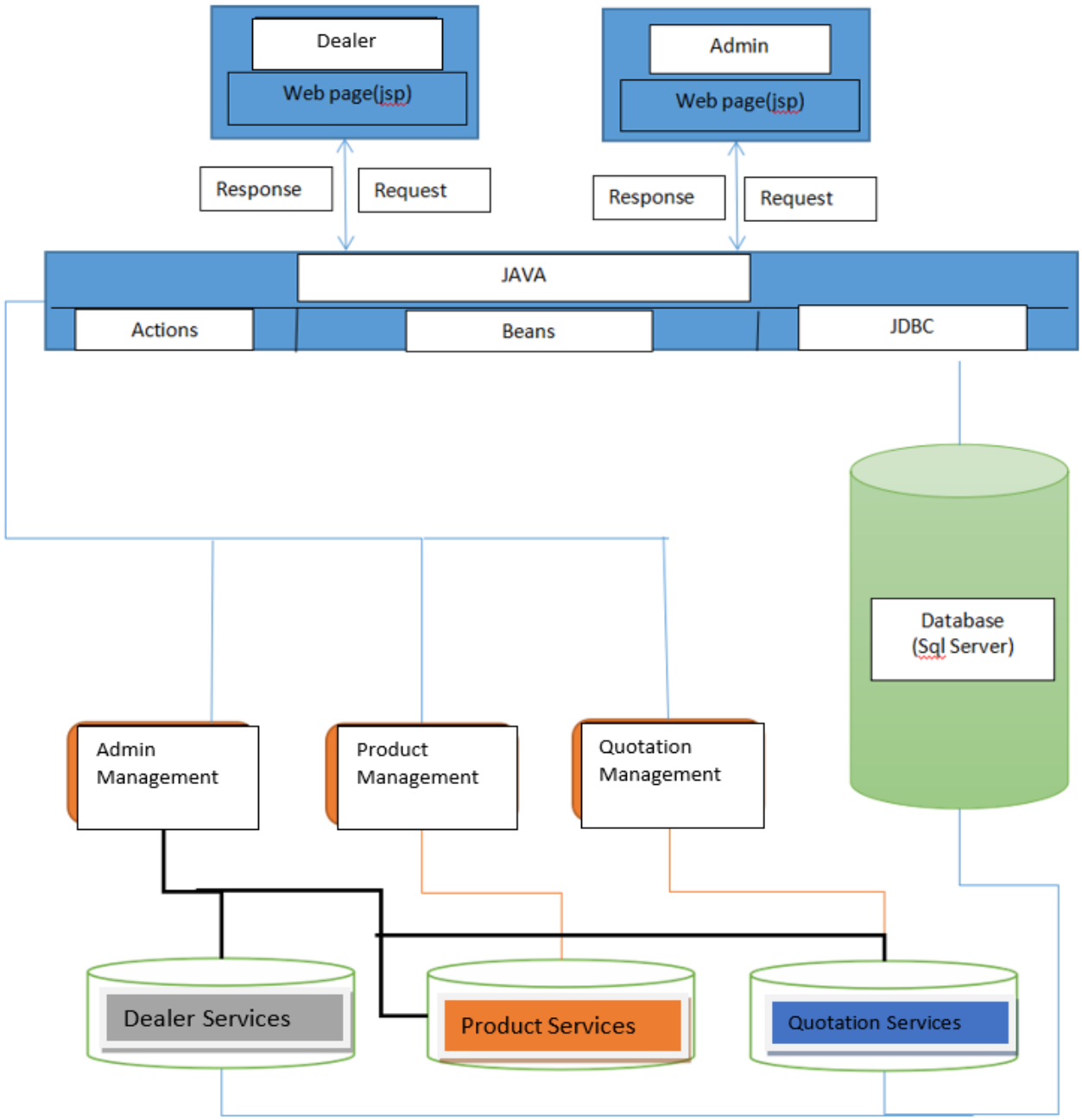
8. **AJAX:** is a set of web development techniques that uses various web technologies on the client-side to create asynchronous web applications. By decoupling the data interchange layer from the presentation layer, Ajax allows web pages and, by extension, web applications, to change content dynamically without the need to reload the entire page.

9. **JAVA:** Java is a programming language and a platform. Java is a high level, robust, object-oriented and secure programming language. Java was developed by Sun Microsystems (which is now the subsidiary of Oracle) in the year 1995. James Gosling is known as the father of Java. Before Java, its name was Oak. Since Oak was already a registered company, so James Gosling and his team changed the name from Oak to Java.

10. **STRUTS2:** Apache Struts is a free, open-source, MVC framework for creating elegant, modern Java web applications, a Model, View, Controller (MVC)

architecture. It enables you to create maintainable, extensible, and flexible web applications based on standard technologies, such as JSP pages, JavaBeans, resource bundles, and XML.

SYSTEM ARCHITECTURE



SOFTWARE MODEL

The meaning of Agile is swift or versatile. “Agile process model" refers to a software development approach based on iterative development. Agile methods break tasks into smaller iterations, or parts do not directly involve long term planning. The project scope and requirements are laid down at the beginning of the development process. Plans regarding the number of iterations, the duration and the scope of each iteration are clearly defined in advance.

Each iteration is considered as a short time "frame" in the Agile process model, which typically lasts from one to four weeks. The division of the entire project into smaller parts helps to minimize the project risk and to reduce the overall project delivery time requirements.

Phases of Agile Model:

- **Requirements gathering:** In this phase, you must define the requirements. You should explain business opportunities and plan the time and effort needed to build the project. Based on this information, you can evaluate technical and economic feasibility.
- **Design the requirements:** When you have identified the project, work with stakeholders to define requirements. You can use the user flow diagram or the

high-level UML diagram to show the work of new features and show how it will apply to your existing system.

- **Construction/ iteration:** When the team defines the requirements, the work begins. Designers and developers start working on their project, which aims to deploy a working product. The product will undergo various stages of improvement, so it includes simple, minimal functionality.
- **Testing:** In this phase, the Quality Assurance team examines the product's performance and looks for the bug.
- **Deployment:** In this phase, the team issues a product for the user's work environment.
- **Feedback:** After releasing the product, the last step is feedback. In this, the team receives feedback about the product and works through the feedback.

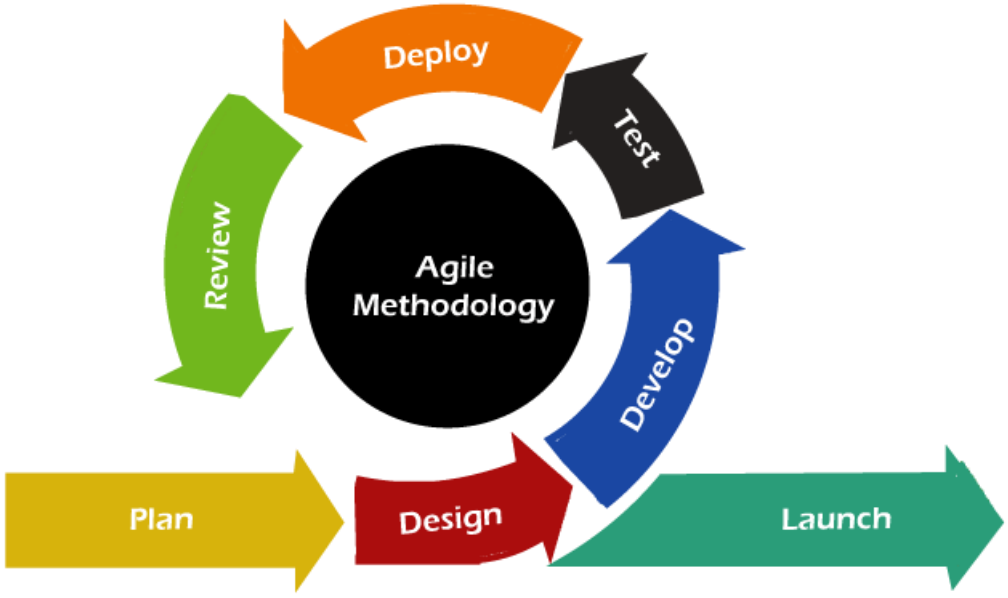


Fig:- Agile Model

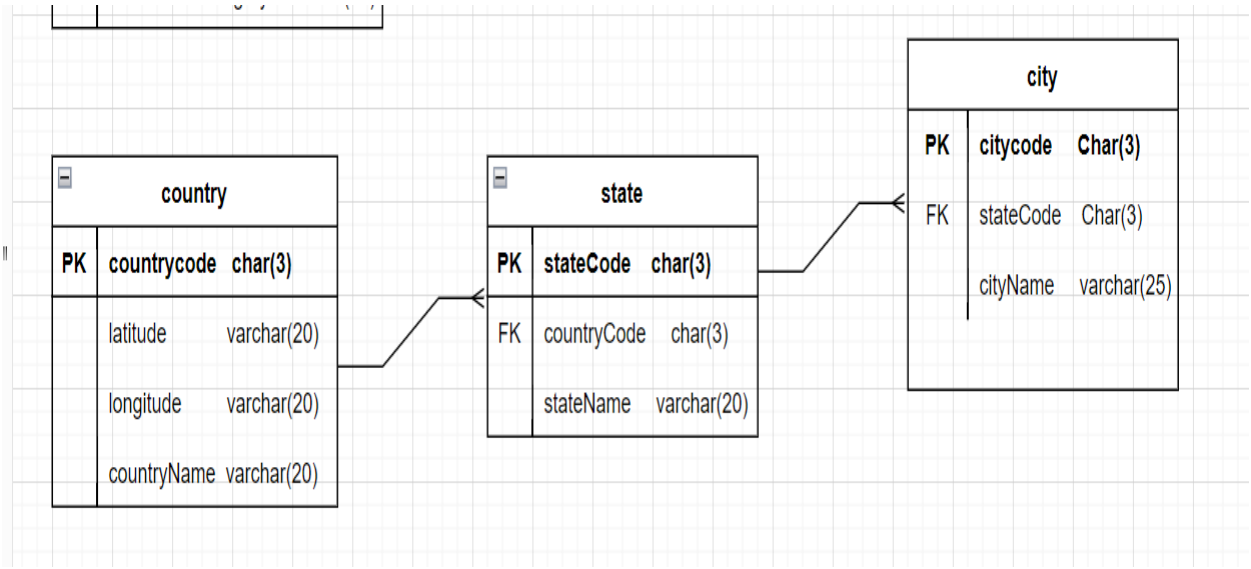
Reason for using Agile Model:

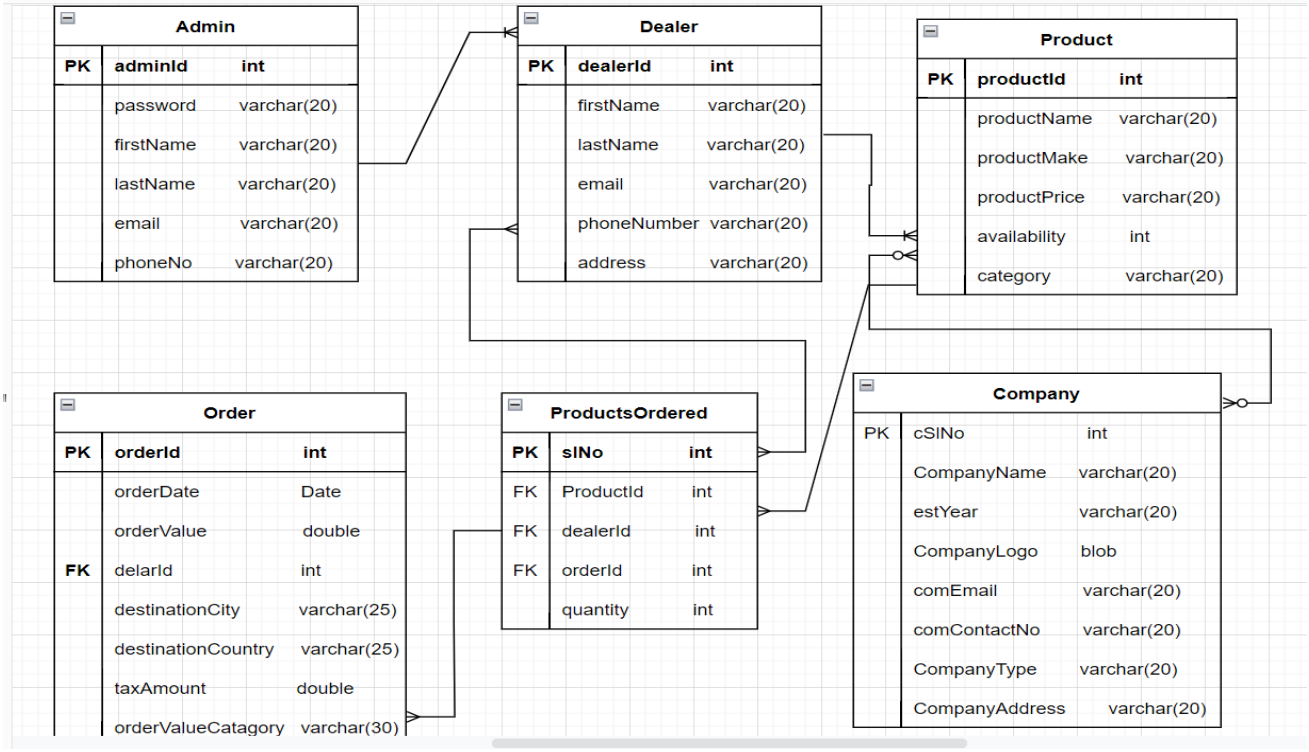
Lean software development methodology follows the principle "just in time production." The lean method indicates the increasing speed of software development and reducing costs.

- When frequent changes are required
- When a highly qualified and experienced team is available
- When project size is small
- Efficient design and fulfils the business requirement
- When a customer is ready to have a meeting with a software team all the time

DATABASE STRUCTURE

We have used 3 database table for our project namely **admin, dealer, product, company, order, products ordered, country, state** the table structure looks like this:





Admin

adminId(PK)	INT
password	VARCHAR(25)
firstName	VARCHAR(25)
lastName	VARCHAR(45)
email	VARCHAR(25)
phoneNumber	INT

Company

companyType	VARCHAR(25)
companyName	VARCHAR(25)
establishmentY	VARCHAR(10)
companyLogo	BLOB
companyEmail	VARCHAR(25)
companyPhone	INT
cSlNo(PK)	INT

ProductsOrdered

orderId(FK)	INT
productId(FK)	INT
dealerUserId(FK)	INT
quantity	INT
slNo(PK)	INT

Products

productId(PK)	INT
productName	VARCHAR(20)
productMake	VARCHAR(20)
ProductPrice	Double
availability	INT
category	VARCHAR(20)

State

countryCode(FK	CHAR(2)
stateCode(PK)	CHAR(2)
stateName	VARCHAR(100)

Country

countryCode(PK	CHAR(2)
latitude	VARCHAR(100)
longitude	VARCHAR(100)
countryName	VARCHAR(100)

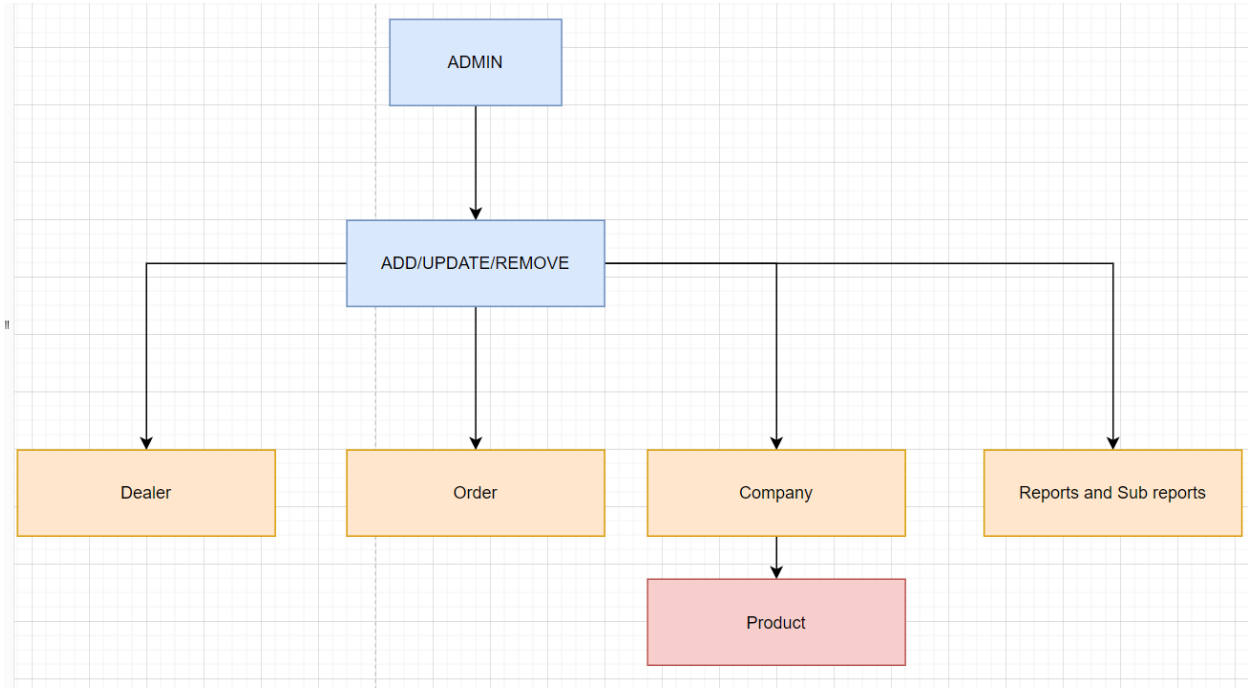
Dealer

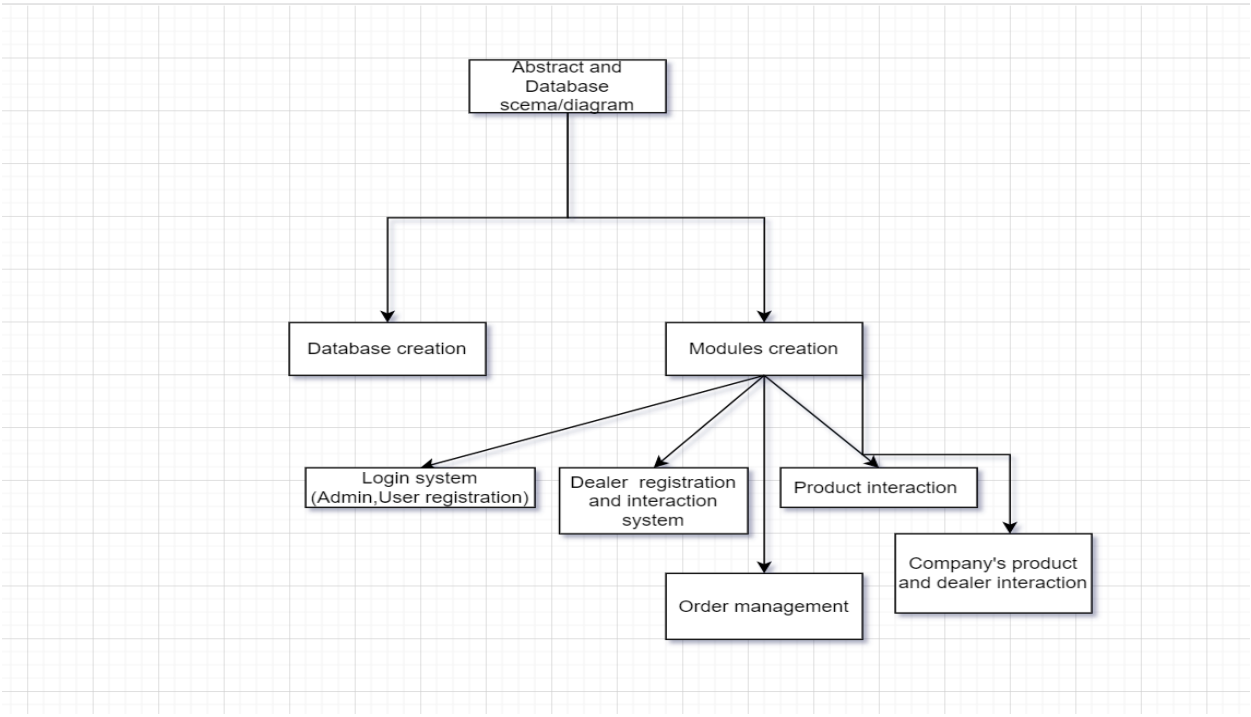
dealerId(PK)	INT
dealerFirstName	VARCHAR(25)
dealerLastName	VARCHAR(25)
dealerEmail	VARCHAR(45)
dealerPhone	INT
dealerAddress	VARCHAR(45)

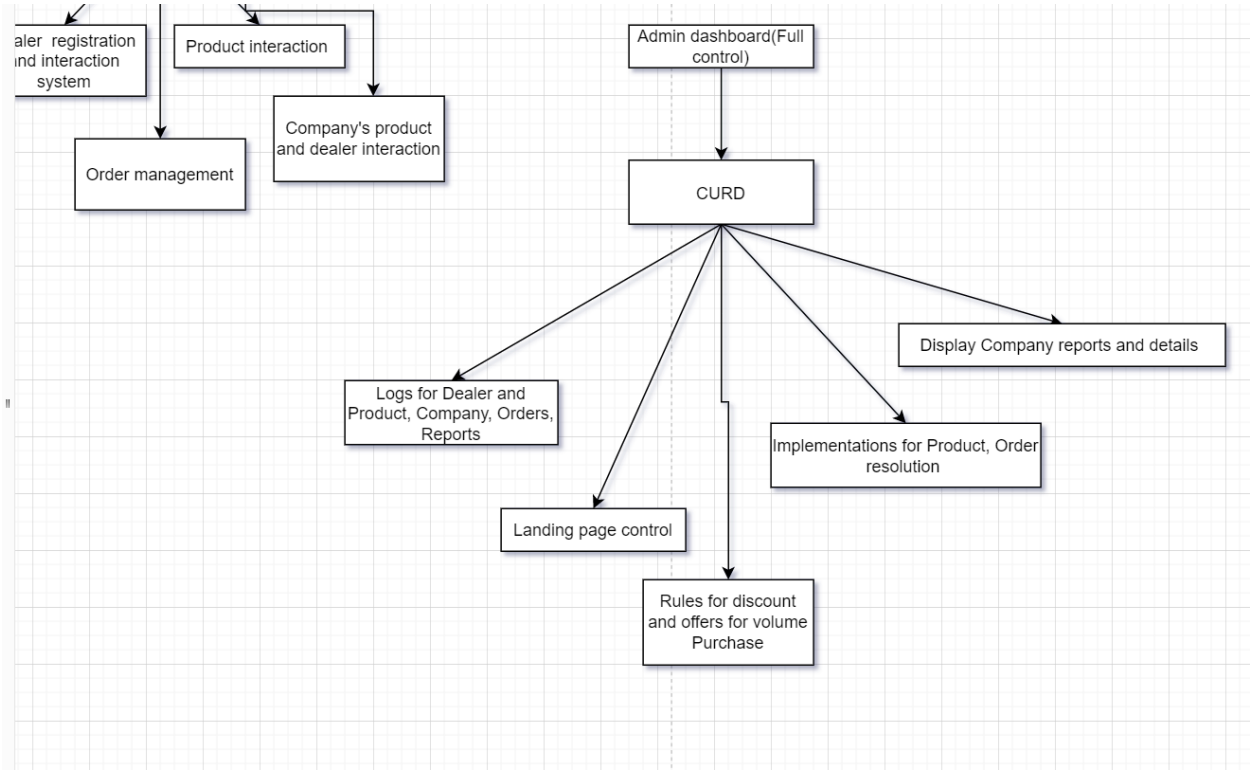
Order

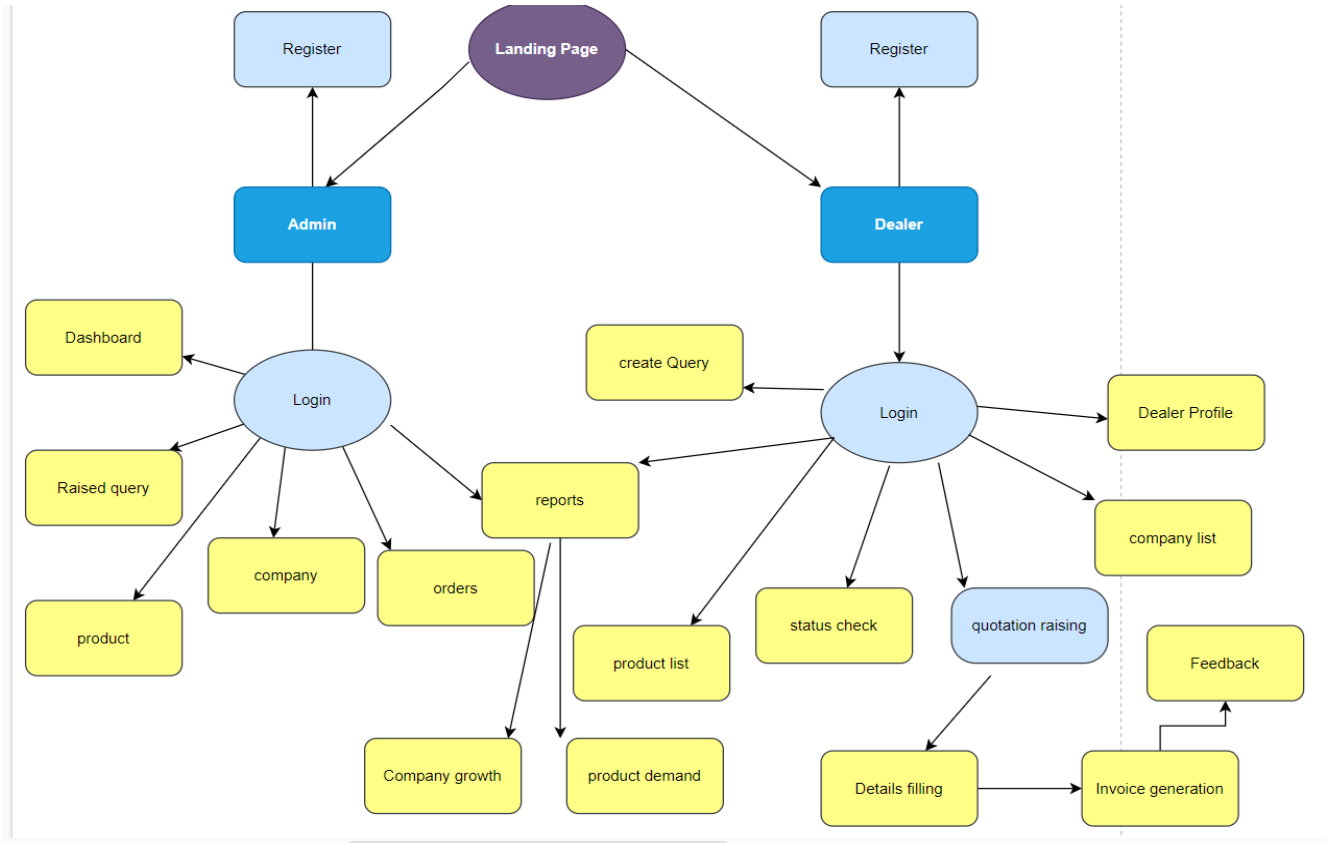
orderId(PK)	INT
dealerId(FK)	INT
orderDate	VARCHAR(10)
orderValue	Double
destination(	VARCHAR(45)
destination(	VARCHAR(45)
orderValue(	VARCHAR(45)

ENTITY RELATIONSHIP DIAGRAM






aler registration
nd interaction
system
Product interaction
Company's product
and dealer interaction
Order management
Admin dashboard(Full
control)
CURD
Display Company reports and details
Logs for Dealer and
Product, Company, Orders,
Reports
Implementations for Product, Order
resolution
Landing page control
Rules for discount
and offers for volume
Purchase


Register
Landing Page
Register
Admin
Dealer
Dashboard
Login
create Query
Login
Dealer Profile
Raised query
reports
company list
company
orders
product
product list
status check
quotation raising
Feedback
Company growth
product demand
Details filling
Invoice generation

FUTURE SCOPE OF QUOTATION GENERATION SYSTEM

- In future we can enhance our application to support Cloud storage which will have huge access in upcoming future
- Quicker conversion of existing open quotations into contracts. Reducing quotation time and using virtual assistant
- Company will have to provide demo products in accordance with reviews to remain in a competitive race

CONCLUSION

Quotation generation is the new concept in the stock market. In india, Quotation generation is at very initial stage. Quotation generation has made it easy to raise quotation in market as now people can raise while sitting at their home.

This project Mainly includes flexibility, reducing manual work in an efficient manner convenient, reliable, Easily Understandable and effective way to apply for their Quotations to company according to previously raised records.

Our quotation software is a simple small business software for creating & managing online quotations. Quotation management play a very crucial role in generating new business especially for small business. Quoting system streamlines the proposal and request for proposal process for sales operations. Basic advantage of quotation management software includes the ability to quickly generate professional and impressive business quotations.