CAR PRODUCT SYSTEM

A PROJECT REPORT

Submitted for

CSE3009 – NoSQL Databases byKoduri Gokul-19BCD7006 B.Arshith Gopal-19bce7402



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1 ABSTRACT

This project focuses mainly on overcoming manual errors and maintaining a computerized system. It is an online application from which users can easily manage car parts, mechanic work details, billing details and sales details.

CHAPTER 1

INTRODUCTION

The Automotive industry is the key driver of any growing economy. A sound transportation system plays a pivotal role in a country's rapid economic and industrial development. Nowadays making a decision while buying parts can be incredibly frustrating, because of the many possibilities. The market is often flooded with an incredible number of options and it can be hard to determine which part is the right one for the job.

1.1 Objectives

The following are the objectives of this project:

- Money Saving.
- Time Saving.
- The online market works for 24x7x365 days a year.
- This means you don't have to worry about the time and can shop anytime from anywhere.
- All you need is a working internet connection.
- Online buying of car parts gives bigger reach and without worrying about the distances

1.2 Background and Literature Survey

It's important to know the difference between used OEM parts and aftermarket parts. The gained knowledge will help to make the best choice, without being frustrated afterwards. Components of an automobile or other manufactured goods, kept in reserve to replace parts that fail. In supply usage, any part, component, or subassembly kept in reserve for the maintenance and repair of major items of equipment. Knowing your car in and out is very important. When your car breaks down in the middle of nowhere, your knowledge on auto parts can help you get started again. Get to know your vehicle thoroughly and completely. It is always good to take some time to surf through several vendors' stores and note down what each seller offers for the particular auto part you are seeking, better than spending time dealing with some of the shopping stores and they increase the price. Usually we try to be honest 100% and get the same barcode like the same part we want to sell, to guarantee if it's available and the original one.

1.3 Organization of the Report

The remaining chapters of the project report are described as follows:

- Chapter 2 contains the proposed system, methodology and software details.
- Chapter 3 gives the cost involved in the implementation of the project.

- Chapter 4 discusses the results obtained after the project was implemented.
- Chapter 5 concludes the report.
- Chapter 6 consists of code.
- Chapter 7 gives references.

CHAPTER 2

This Chapter describes the proposed system, working methodology and software details.

2.1 Proposed System

The following block diagram shows the system architecture of this project.

ADMINISTR Data Input Stage
ATOR

Data Out Put Stage

Ul Screens

User

User

Data Out Put Stage

Reports

3

2.2 Working Methodology

The project is completely based on software with two sections, front-end and back-end. The front-end consists of an HTML (Hypertext Markup Language) file and a CSS (Cascading Style Sheets) file.

Being a static website, it has been hosted on the MongoDB cloud using the JavaScript 'Node.js' and 'Express site search generator'.

In this project, we are going to build a car parts shop which is a very simple website and users can easily browse sites and can add either a parts or mechanic workers names.

For example, if we want to add tyres, we can provide the URL and a description and then save it. So that it will be able to be viewed on thesite. The process is similar for mechanical workers too.

2.2.1 App setup and Pug Intro:

For creating this application, we used an Express generator and pug file which helps us to use the pod template.

Pug is a template engine for Node.js. A template engine allows us to inject data and then produce HTML.

In this stage we actually create the front-end of the website by introducing NPM (Node Package Manager) and pug.

4

2.2.2 Add Website:

In this stage, we will be able to add a website by creating a new file called add_website.pug in which URL, title, description, required text area for description and submit button are created. And then we are going to have a model function called website, this will take the model and call add_website.pug. And going to pass along that website and then our call back will just use a function.

We're going to create a folder called Models in which we're going to bring in Mongoose and Mongoose search plugin. By creating the schema called website schema in which we will be adding the search plug, using this model we are storing the websites which we have added.

2.2.3 Search Website:

In this we can add a website we want to do and we are able to search for it. We're going to bring in our model and have a function called search websites which functions by passing our search text and we'll have our call back in return this call back displays the websites with title.

If there is an error or any unknown website is searched, it will return to the home page.

2.2.4 Add products and search:

The process is the same as website search.

Create a new file called articles.js in the route folder and a model file 'article.js'. Similar to the function of a website, when a product is posted, the fields of articles like URL,price, review, description are displayed.

CHAPTER 3 MONGODB DATABASE ANALYSIS

3.1 Databases and attributes

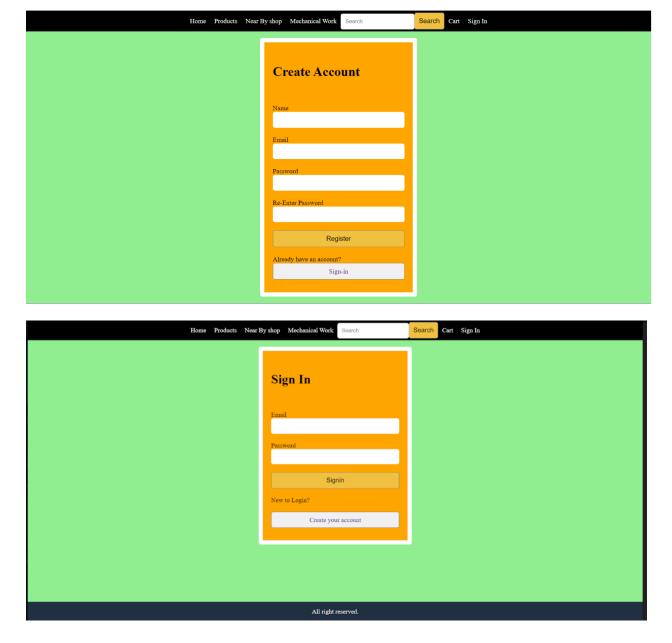
We used MongoDB and Mongoose models for data collection and storage. **3.1.1 MongoDB:** It is a document database, which means it stores data in JSON-like documents. **3.1.2 Mongoose:** Mongoose is an Object Data Modeling (ODM) library for MongoDB and Node.js. It manages relationships between data, provides schema validation, and is used to translate between objects

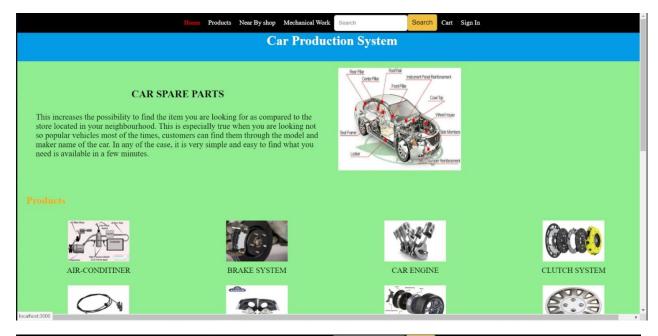
in code and the representation of those objects in MongoDB.

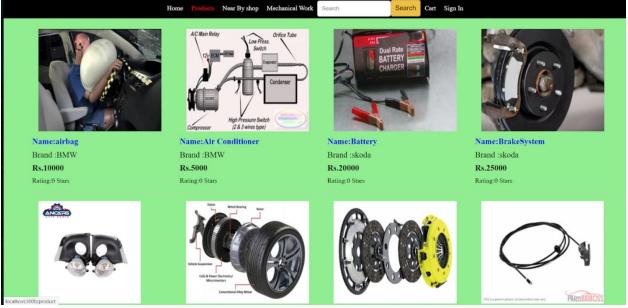
CHAPTER 4

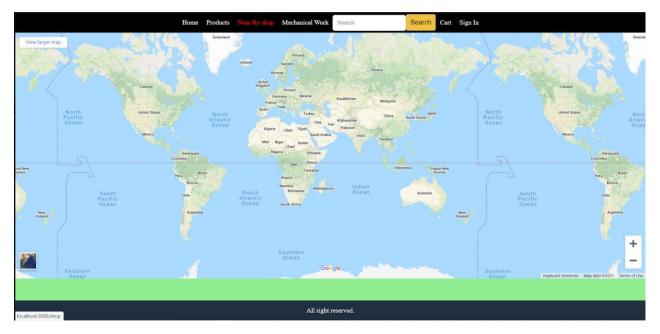
RESULTS AND DISCUSSIONS

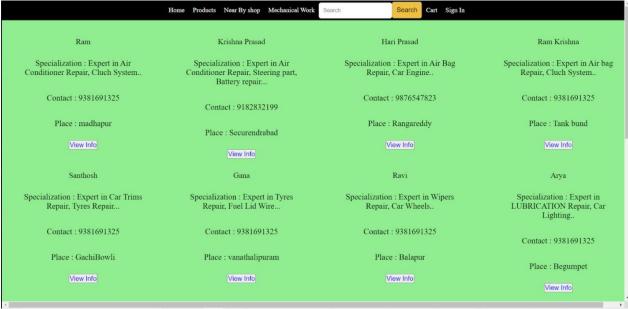
The application consists of a web page allowing the user to add a website's title, URL, and description (if needed) and product title, price, review and save it. Further when we search for a particular website or a product, it automatically comes up.



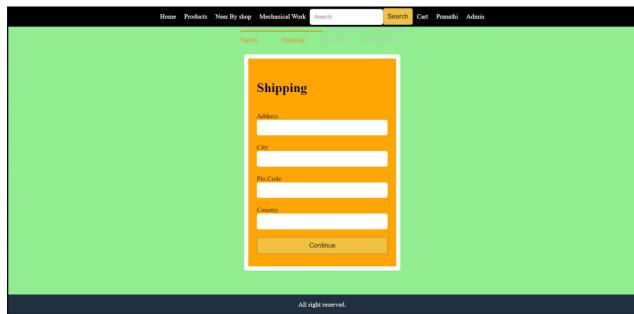


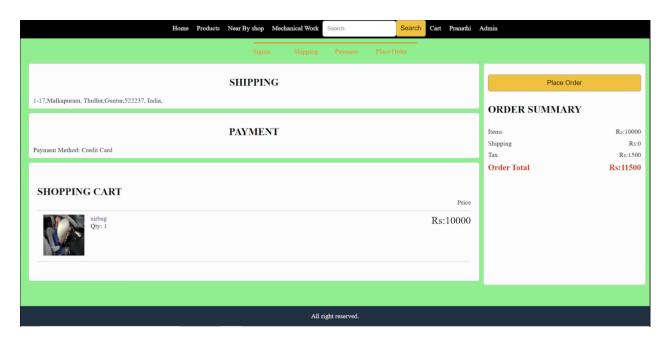








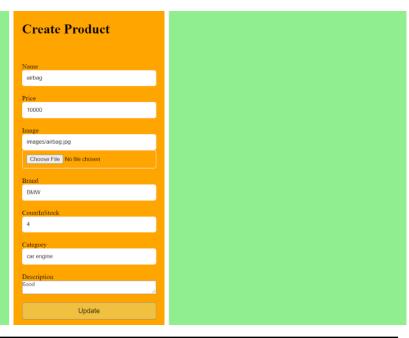






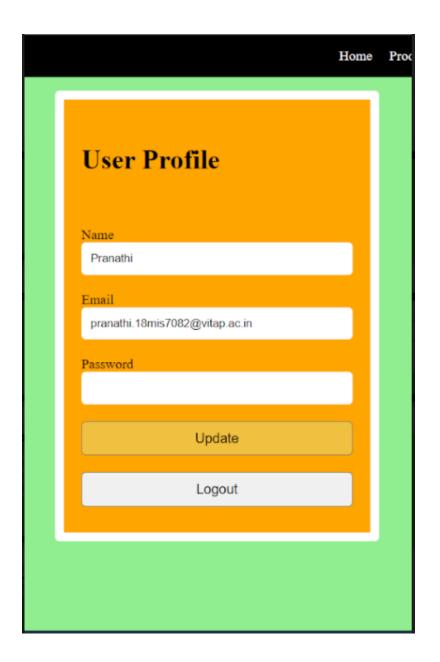
	Home Products Near B	ly shop Mech	nanical Work Search		Search	Or	ders		
			ORDERS	S		Pro	oducts		
ID	DATE	TOTAL	USER	PAID	PAID AT	DELIVERED	DELIVERED AT	ACTION	S
60c11259d5d8734a204a6815	2021-06-09T19:11:21.323Z	17250	Pranathi	false		false		Details	Delete
60c11549d5d8734a204a6818	2021-06-09T19:23:53.728Z	17250	Pranathi Thokala	false		false		Details	Delete
60c177b8d5d8734a204a6826	2021-06-10T02:23:52.260Z	5750	Pranathi Thokala	false		false		Details	Delete
60c1781bd5d8734a204a6829	2021-06-10T02:25:31.981Z	28750	likhitha	false		false		Details	Delete
60c17862d5d8734a204a682c	2021-06-10T02:26:42.784Z	28750	likhitha	false		false		Details	Delete
60c1af33d5d8734a204a682e	2021-06-10T06:20:35.527Z	11500	likhitha	false		false		Details	Delete
60c2ddf48c445557702d2bf0	2021-06-11T03:52:20.191Z	11500	Pranathi	false		false		Details	Delete
			24.22	v.					
calhost3000/orders			All right reserve	ed.					

Create Product	
Name	
Price	4
Image	4
Choose File No file chosen	
Brand	
CountInStock	-
Category	4
Description	
Create	









6 **CHAPTER 5**

CONCLUSION AND FUTURE WORK

For future work, we are expecting more and more products and mechanical staff members to provide service. The use of new materials such as ultra-high-strength steels, aluminum and carbon fiber in the technology could help the industry to be more creative in terms of producing innovative auto markets for consumers. Thus, the combination of these materials is also an important strategy to approach for the increase in sales and profits.

CHAPTER 6

APPENDIX (ONLY NOSQL CODE)

App.js

```
import React from 'react';
import './App.css';
import Home from './Home';
import Mechanical from './Mechanical';
import NearShop from './NearShop';
import {BrowserRouter, Route, Link} from 'react-router-dom';
// import HomeIcon from '@material-ui/icons/Home'
import HomeScreen from './Screen/HomeScreen';
import ProductsScreen from './Screen/ProductsScreen';
import SignInScreen from './Screen/SignInScreen';
import { useSelector } from 'react-redux';
import RegisterScreen from './Screen/RegisterScreen';
import ProductScreen from './Screen/ProductScreen';
import CartScreen from './Screen/CartScreen';
import ShippingScreen from './Screen/ShippingScreen';
import ProfileScreen from './Screen/ProfileScreen';
import PaymentScreen from './Screen/PaymentScreen';
```

```
import PlaceOrderScreen from './Screen/PlaceOrderScreen';
import OrderScreen from './Screen/OrderScreen';
import OrdersScreen from './Screen/OrdersScreen';
function App(){
 const openMenu = () => {
  document.querySelector('.sidebar').classList.add('open');
 };
 const closeMenu = () => {
  document.querySelector('.sidebar').classList.remove('open');
 };
 const userSignin = useSelector(state => state.userSignin);
 const {userInfo} = userSignin;
    return(
     <BrowserRouter>
    <div class="grid-container">
```

```
{/* < div className="brand">
      <button onClick={openMenu}>&#9776;</button>
     </div> */}
    <div className="header-links">
    <Link to = "/">Home</Link>
    <Link to="/product">Products</Link>
    <Link to="/shop">Near By shop</Link>
    <Link to="/mechanical">Mechanical Work</Link>
           <input type="text" className="form-control" placeholder="Search"</pre>
id="search" />
                            type="submit"
                                              className="button
                                                                    primary"
                 <button
id="search_btn">Search</button>
    <Link to="/cart">Cart</Link>
      {userInfo?(
        <Link to="/profile">{userInfo.name}</Link>
      ):(
        <Link to="/signin">Sign In</Link>
      )}
      {userInfo && userInfo.isAdmin && (
```

<header class="header">

```
<div className="dropdown">
   <a href="#">Admin</a>
   <
    <Link to="/orders">Orders</Link>
    <Link to="/products">Products</Link>
    </div>
 )}
</div>
</header>
<aside className="sidebar">
<h3>Shopping Categories</h3>
<button className="sidebar-close-button" onClick={closeMenu}>
 \mathbf{X}
</button>
<
  <Link to="/category/Pants">Categories</Link>
```

```
<li>>
   <Link to="/category/Shirts">Brands</Link>
  </aside>
<main class="main">
<div class="content">
<Route path="/orders" component={OrdersScreen} />
<Route path="/order/:id" component={OrderScreen} />
<Route path="/profile" component ={ProfileScreen}/>
<Route path="/payment" component ={PaymentScreen}/>
<Route path="/placeorder" component ={PlaceOrderScreen}/>
<Route path="/products" component ={ProductsScreen}/>
<Route path="/shipping" component ={ShippingScreen}/>
 <Route path="/signin" component ={SignInScreen}/>
<Route path="/register" component ={RegisterScreen}/>
<Route path="/product/:id" component ={ProductScreen}/>
<Route path="/cart/:id?" component ={CartScreen} />
```

```
<Route path="/product" component ={HomeScreen}/>
     <Route path ="/" exact={true} component ={Home} />
     <Route path ="/mechanical" component ={Mechanical} />
     <Route path ="/shop" component ={NearShop} />
     </div>
    </main>
    <footer class="footer">
     All right reserved.
    </footer>
   </div>
   </BrowserRouter>
   )
export default App;
```

Home.js

```
import React from 'react'
// import HomeIcon from '@material-ui/icons/Home'
function Home(){
   return(
    <div className="container">
  <div id="box1">
   <h1> Car Production System</h1>
  </div>
  <nav className="collapse navbar-collapse">
   </nav>
  {/* <video autoplay muted loop id="myVideo">
  <source src="images/hero.mp4" type="video/mp4" />
 </video> */}
  <div className="row align-items-center">
   <div className="col-md-6 pt-md-0 pt-4">
               <h3 className="mb-sm-4 mb-3 title aos-init aos-animate"
```

```
data-aos="fade-right"><br/>
<span>Car Spare Parts</span>
</h3>
```

This increases the
possibility to find the item you are

looking for as compared to the store located in your neighbourhood. This is especially true when you are

looking not so popular vehicles most of the times, customers can find them through the model and maker name of

the car. In any of the case, it is very simple and easy to find what you need is available in a few minutes.

```
<div className="_5upzc " id="CONSUMABLE_PRODUCTS">
  <div className="_2KwjF"></div>
  <div className="_1Jc_u">
    <h2 className="_24ska">Products</h2>
  </div>
  <div className="_2aQHH">
    <
      <div className="lXi3Q">
       <img src="/images/Airconditioner.jpg" alt="Air-Conditinor"/>
      </div>
      <div className="_1fXIc">
       <h3 className="_2WpkP">Air-Conditiner</h3>
      </div>
     <1i>>
              <div className="IXi3Q"><img src="/images/BrakeSystem.jpg"</pre>
alt="Brake"/></div>
      <div className="_1fXIc">
```

```
<h3 className="_2WpkP">Brake System</h3>
 </div>
<
 <div className="1Xi3Q">
  <img src="/images/CarEngine.png" alt="Engine"/>
 </div>
 <div className="_1fXIc">
  <h3 className="_2WpkP">Car Engine</h3>
 </div>
<
 <div className="lXi3Q">
  <img src="/images/Cluch.jpg" alt="Cluch"/>
 </div>
 <div className="_1fXIc">
  <h3 className="_2WpkP">Clutch System</h3>
 </div>
```

```
<
 <div className="lXi3Q">
  <img src="/images/FuelLid.jpg" alt="Fuel"/>
 </div>
 <div className="_1fXIc">
  <h3 className="_2WpkP">Fuel Lid and Cap</h3>
 </div>
<
 <div className="lXi3Q">
  <img src="/images/carlight.jpg" alt="Lighting"/>
 </div>
 <div className="_1fXIc">
  <h3 className="_2WpkP">Car Lighting</h3>
 </div>
<
 <div className="1Xi3Q">
```

```
<img src="/images/carWheels.jpg" alt="Wheels"/>
    </div>
    <div className="_1fXIc">
     <h3 className="_2WpkP">Car wheel and Rims</h3>
    </div>
   <
    <div className="lXi3Q">
     <img src="/images/trim.jpg" alt="Trims"/>
    </div>
    <div className="_1fXIc">
     <h3 className="_2WpkP">Car Trims</h3>
    </div>
   </div>
</div>
<div className="_5upzc " id="CONSUMABLE_PRODUCTS">
<div className="_2KwjF"></div>
```

```
<h2 className="_24ska">Consumables Products</h2>
   </div>
   <div className="_2aQHH">
    <
      <div className="lXi3Q">
       <img src="/images/LUBRICATION.jpg" alt="Hydraulics"/>
      </div>
      <div className="_1fXIc">
       <h3 className="_2WpkP">Lubrication & amp; Hydraulics</h3>
      </div>
     <
                   <div className="lXi3Q"><img src="/images/wiper.png"</pre>
alt="Wipers"/></div>
      <div className="_1fXIc">
       <h3 className="_2WpkP">Wipers</h3>
      </div>
```

<div className="_1Jc_u">

```
<
     <div className="lXi3Q">
      <img src="/images/tyres.png" alt="tyres"/>
     </div>
     <div className="_1fXIc">
      <h3 className="_2WpkP">Tyres</h3>
     </div>
    <
     <div className="lXi3Q">
      <img src="/images/battery.jpg" alt="Batteries"/>
     </div>
     <div className="_1fXIc">
      <h3 className="_2WpkP">Batteries</h3>
     </div>
    </div>
 </div>
</div>
```

```
)
export default Home
Cartactions.js
import Axios from 'axios'
import Cookie from 'js-cookie'
                        CART_ADD_ITEM,
import
                                                   CART_REMOVE_ITEM,
CART_SAVE_SHIPPING,
                               CART_SAVE_PAYMENT
                                                              }
                                                                       from
'../constants/cartConstants';
const addToCart =(productId, qty) => async (dispatch, getState) =>
{
  try
  {
    const {data} =await Axios.get("/api/products/" + productId);
    dispatch({
      type: CART_ADD_ITEM, payload:
        product:data._id,
```

```
name:data.name,
         image:data.image,
         price:data.price,
         countInStock: data.countInStock,
         qty
       }
    });
    const {cart: {cartItems }} = getState();
    Cookie.set("cartItems", JSON.stringify(cartItems));
  } catch (error)
const removeFromCart = (productId) => (dispatch, getState) =>
 dispatch({type : CART_REMOVE_ITEM, playload : productId});
```

```
const {cart: {cartItems }} = getState();
 Cookie.set("cartItems", JSON.stringify(cartItems));
}
const saveShipping = (data) => (dispatch) =>
{
 dispatch({type : CART_SAVE_SHIPPING, playload : data});
}
const savePayment = (data) => (dispatch) =>
{
 dispatch({type : CART_SAVE_PAYMENT, playload : data});
}
export { addToCart, removeFromCart, saveShipping , savePayment}
Orderconstants.js
export const ORDER_CREATE_REQUEST = 'ORDER_CREATE_REQUEST';
```

```
export const ORDER_CREATE_SUCCESS = 'ORDER_CREATE_SUCCESS';
export const ORDER_CREATE_FAIL = 'ORDER_CREATE_FAIL';
export const ORDER_DETAILS_REQUEST = 'ORDER_DETAILS_REQUEST';
export const ORDER_DETAILS_SUCCESS = 'ORDER_DETAILS_SUCCESS';
export const ORDER_DETAILS_FAIL = 'ORDER_DETAILS_FAIL';
export const MY_ORDER_LIST_REQUEST = 'MY_ORDER_LIST_REQUEST';
export const MY_ORDER_LIST_SUCCESS = 'MY_ORDER_LIST_SUCCESS';
export const MY_ORDER_LIST_FAIL = 'MY_ORDER_LIST_FAIL';
export const ORDER_LIST_REQUEST = 'ORDER_LIST_REQUEST';
export const ORDER_LIST_SUCCESS = 'ORDER_LIST_SUCCESS';
export const ORDER_LIST_FAIL = 'ORDER_LIST_FAIL';
export const ORDER_PAY_REQUEST = 'ORDER_PAY_REQUEST';
export const ORDER_PAY_SUCCESS = 'ORDER_PAY_SUCCESS';
export const ORDER_PAY_FAIL = 'ORDER_PAY_FAIL';
```

export const ORDER_DELETE_REQUEST = 'ORDER_DELETE_REQUEST';

```
export const ORDER_DELETE_SUCCESS = 'ORDER_DELETE_SUCCESS';

export const ORDER_DELETE_FAIL = 'ORDER_DELETE_FAIL';

// export const ORDER_SUMMARY_REQUEST';

// export const ORDER_SUMMARY_SUCCESS = 'ORDER_SUMMARY_SUCCESS';

// export const ORDER_SUMMARY_FAIL = 'ORDER_SUMMARY_FAIL';
```

REFERENCES

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https://www.autofacets.com/parts-inventory-management-system/

https://www.elvadms.com/industries/spare-part-sales-management/