Based on the requirements from your uploaded **Task 8** PDF, here's a basic full-stack implementation using **MERN Stack (MongoDB, Express, React, Node.js)** to view Buyers, Products, and Transactions with search, filter, and detailed views.

Backend (Express + MongoDB)

const mongoose = require('mongoose');

const BuyerSchema = new mongoose.Schema({

name: String,

email: String,

phone: String,

address: String,

purchaseHistory: [

{

transactionId: String,

amountSpent: Number,

paymentMethod: String

}

]

});

module.exports = mongoose.model('Buyer', BuyerSchema);

**models/Product.js**

const mongoose = require('mongoose');

const ProductSchema = new mongoose.Schema({

name: String,

category: String,

price: Number,

stock: Number,

description: String,

supplierInfo: String,

images: [String],

relatedItems: [String]

});

module.exports = mongoose.model('Product', ProductSchema);

**models/Transaction.js**

const mongoose = require('mongoose');

const TransactionSchema = new mongoose.Schema({

transactionId: String,

buyerName: String,

productName: String,

date: Date,

quantity: Number,

totalAmount: Number,

paymentMethod: String,

orderStatus: String,

notes: String

});

module.exports = mongoose.model('Transaction', TransactionSchema);

routes/api.js

const express = require('express');

const router = express.Router();

const Buyer = require('../models/Buyer');

const Product = require('../models/Product');

const Transaction = require('../models/Transaction');

// Buyers

router.get('/buyers', async (req, res) => {

const buyers = await Buyer.find();

res.json(buyers);

});

router.get('/buyers/:id', async (req, res) => {

const buyer = await Buyer.findById(req.params.id);

res.json(buyer);

});

// Products

router.get('/products', async (req, res) => {

const products = await Product.find();

res.json(products);

});

router.get('/products/:id', async (req, res) => {

const product = await Product.findById(req.params.id);

res.json(product);

});

// Transactions

router.get('/transactions', async (req, res) => {

const transactions = await Transaction.find();

res.json(transactions);

});

router.get('/transactions/:id', async (req, res) => {

const transaction = await Transaction.findById(req.params.id);

res.json(transaction);

});

module.exports = router;

**Frontend (React + Tailwind CSS)**

import React, { useEffect, useState } from 'react';

import axios from 'axios';

function BuyersList() {

const [buyers, setBuyers] = useState([]);

const [search, setSearch] = useState('');

useEffect(() => {

axios.get('/api/buyers').then(res => setBuyers(res.data));

}, []);

const filteredBuyers = buyers.filter(b =>

b.name.toLowerCase().includes(search.toLowerCase()) ||

b.email.toLowerCase().includes(search.toLowerCase()) ||

b.phone.includes(search)

);

return (

<div className="p-4">

<input

type="text"

placeholder="Search buyers..."

className="mb-4 p-2 border"

onChange={e => setSearch(e.target.value)}

/>

<table className="w-full border">

<thead>

<tr>

<th>Name</th><th>Email</th><th>Phone</th><th>Address</th>

</tr>

</thead>

<tbody>

{filteredBuyers.map(buyer => (

<tr key={buyer.\_id}>

<td>{buyer.name}</td>

<td>{buyer.email}</td>

<td>{buyer.phone}</td>

<td>{buyer.address}</td>

</tr>

))}

</tbody>

</table>

</div>

);

}

export default BuyersList;