



Department of Computer Science & Engineering

DBMS Mini-Project Synopsis - Academic Year 2023-24

1	Title of the Project	Online Agricultural Marketplace System
2	Laboratory Batch	A2
3	Department	Computer Science and Engineering
4	Project Area/Domain	Database Management System
5	Project Type	Web-based Agricultural Management
6	Name of the Students with USN	1. Manikanta - 4SF21CS078 2. Sanath - 4SF21CS138
7	Name of Guide	Dr. Priya R Kamath



8. Problem Statement and Description

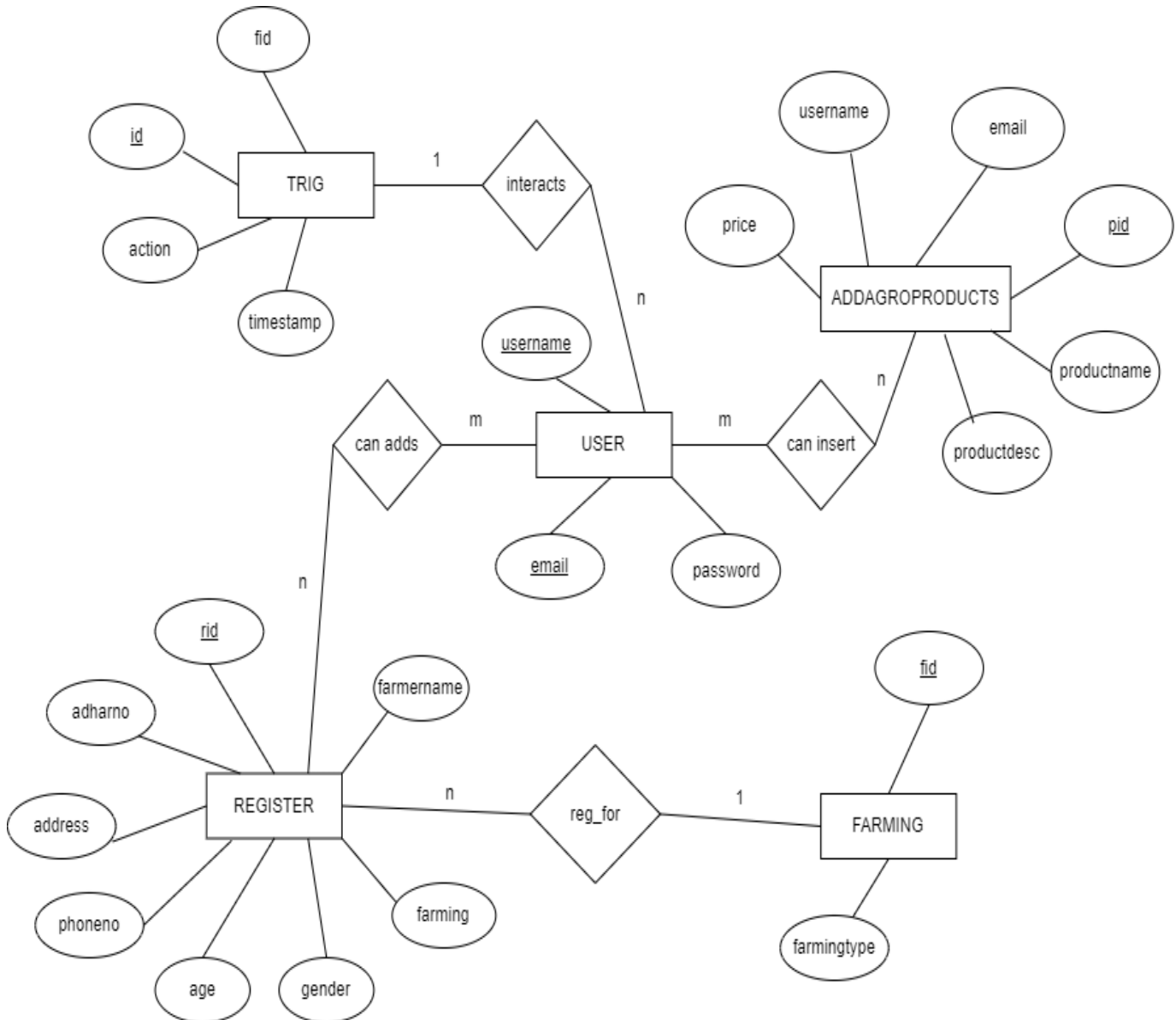
Problem Statement:

The existing agricultural supply chain faces inefficiencies and lacks a digital platform for farmers and customers to streamline the buying and selling process. The absence of an online marketplace hinders farmers' ability to reach a wider audience and maximize profits. There is a need for a comprehensive solution that allows farmers to showcase their products, facilitates buyer interaction through purchase requests for quality checks, and ultimately connects farmers with customers in a digital environment. The system should include secure login credentials for both farmers and customers, a centralized data collection mechanism, and dedicated sections for articles and agricultural products to enhance farmers' product visibility and economic viability.

Description:

The current state of the agricultural supply chain is plagued by inefficiencies and a lack of a digital platform, posing significant challenges for both farmers and customers. This absence of an online marketplace inhibits farmers from reaching a broader audience and optimizing their profits. The pressing need is for a comprehensive solution that addresses these issues by providing farmers with a platform to showcase their products. The envisioned Online Agricultural Marketplace System aims to revolutionize the buying and selling process in agriculture. It will serve as a digital hub where farmers can exhibit their products, fostering a direct connection with potential customers. By implementing a secure login system for both farmers and customers, the platform ensures a trustworthy and reliable environment. One of the key features of this system is a centralized data collection mechanism, which streamlines information management and enhances overall efficiency in the agricultural supply chain. Moreover, the system will facilitate buyer interaction by allowing purchase requests for quality checks, ensuring transparency and satisfaction in transactions. In conclusion, the envisioned Online Agricultural Marketplace System is poised to revolutionize the agricultural supply chain by providing a digital platform that connects farmers with a broader customer base. By addressing existing inefficiencies, streamlining communication, and enhancing product visibility, this innovative solution seeks to empower farmers economically, foster sustainable agriculture, and create a more resilient and interconnected agricultural ecosystem.

9. Entity Relationship Diagram





10. ER to Relational Schema

STEP 1: Mapping of strong entity types

USER

<u>username</u>	<u>email</u>	password
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REGISTER

<u>rid</u>	farmername	adharno	gender	age	phoneno	address	farming
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FARMING

<u>fid</u>	farmingtype
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ADDAGROPRODUCTS

<u>pid</u>	username	email	productdesc	productname
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TRIG

rid	<u>id</u>	action	timestamp
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STEP 2: Mapping of weak entity types

There are no explicit weak entities in the provided schema

STEP 3: Mapping of 1:1 Binary Entities

The ER diagram of the project does not contain 1:1 binary relationship



STEP 4: Mapping of 1:N Binary Entities

USER

<u>username</u>	<u>email</u>	password
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REGISTER

<u>rid</u>	farmername	adharno	gender	age	phoneno	address	farming
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FARMING

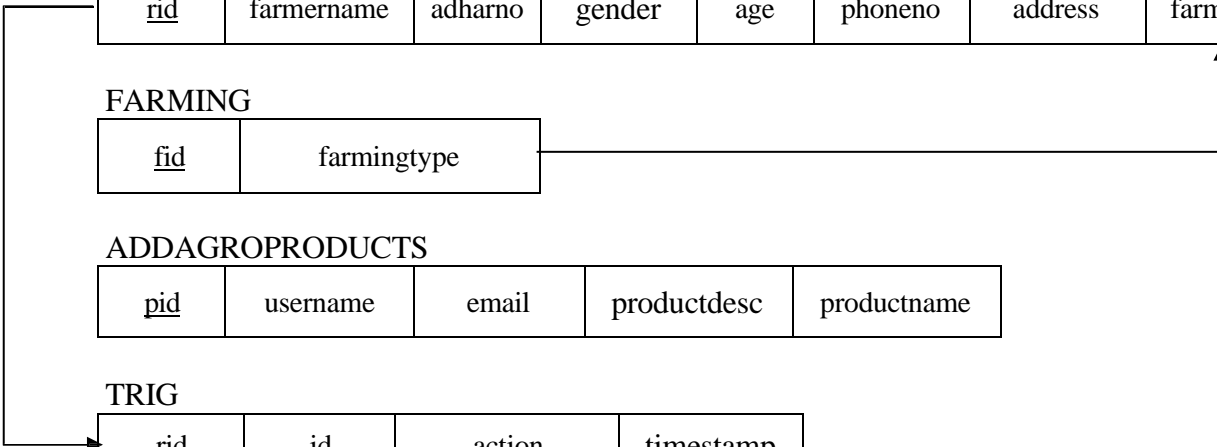
<u>fid</u>	farmingtype
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ADDAGROPRODUCTS

<u>pid</u>	username	email	productdesc	productname
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TRIG

rid	<u>id</u>	action	timestamp
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STEP 5: Mapping of M:N Binary Entities

USER

<u>username</u>	<u>email</u>	password
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REGISTER

<u>rid</u>	farmername	adharno	gender	age	phoneno	address	farming
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FARMING

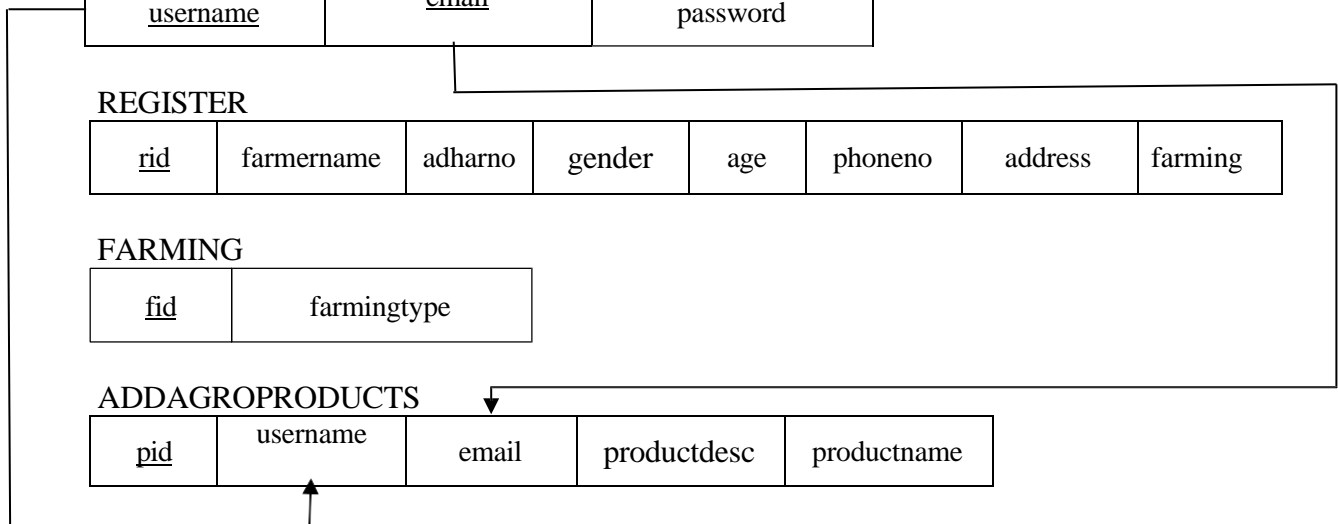
<u>fid</u>	farmingtype
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ADDAGROPRODUCTS

<u>pid</u>	username	email	productdesc	productname
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TRIG

rid	<u>id</u>	action	timestamp
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STEP 6: Mapping of Multivalued Entities

The ERD of this project does not contain any multivalued attributes

STEP 7: Mapping of N-ary Relation

The ERD of this project does not contain N-ary relationship

11. Schema Diagram

