Database Management System

MINI PROJECT

TEAM MEMBERS

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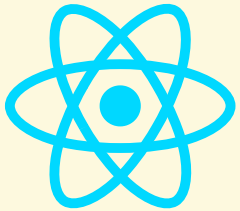
Acknowledgement

We would like to express our special thanks of gratitude to our DBMS teacher 'Ms. Namita Gupta' for her guidance and support in completing our project.

Pizzario

TECH STACK

git



React

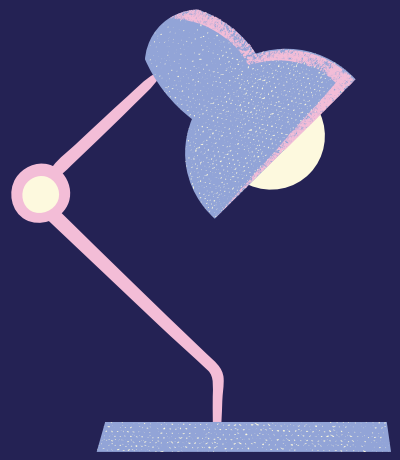
express

mongoDB

HTML

Bootstrap

CSS



FrontEnd: HTML, CSS, JS, ReactJS

BackEnd: NodeJS, ExpressJS

Database: MongoDB, Mongoose

Testing & Documentation:

GitHub, Postman, Visual Studio

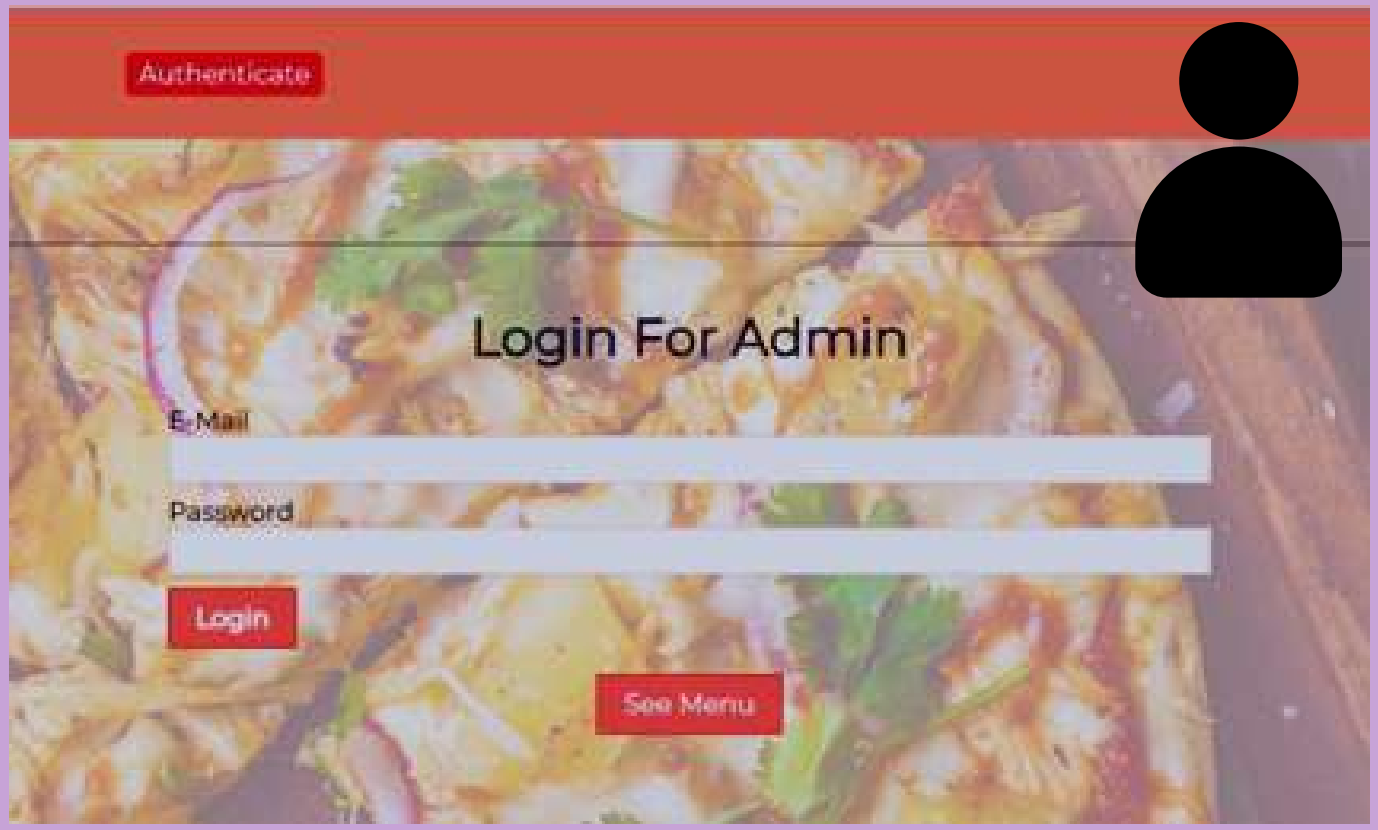
Idea behind working of application:

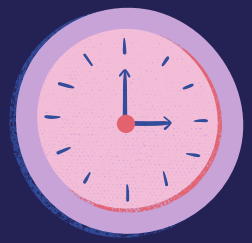
Users can visit the website and they have the options of registering and logging into the website. They can also check the menu of items even before logging in.

Admins can basically add, delete and edit products with their images as well.

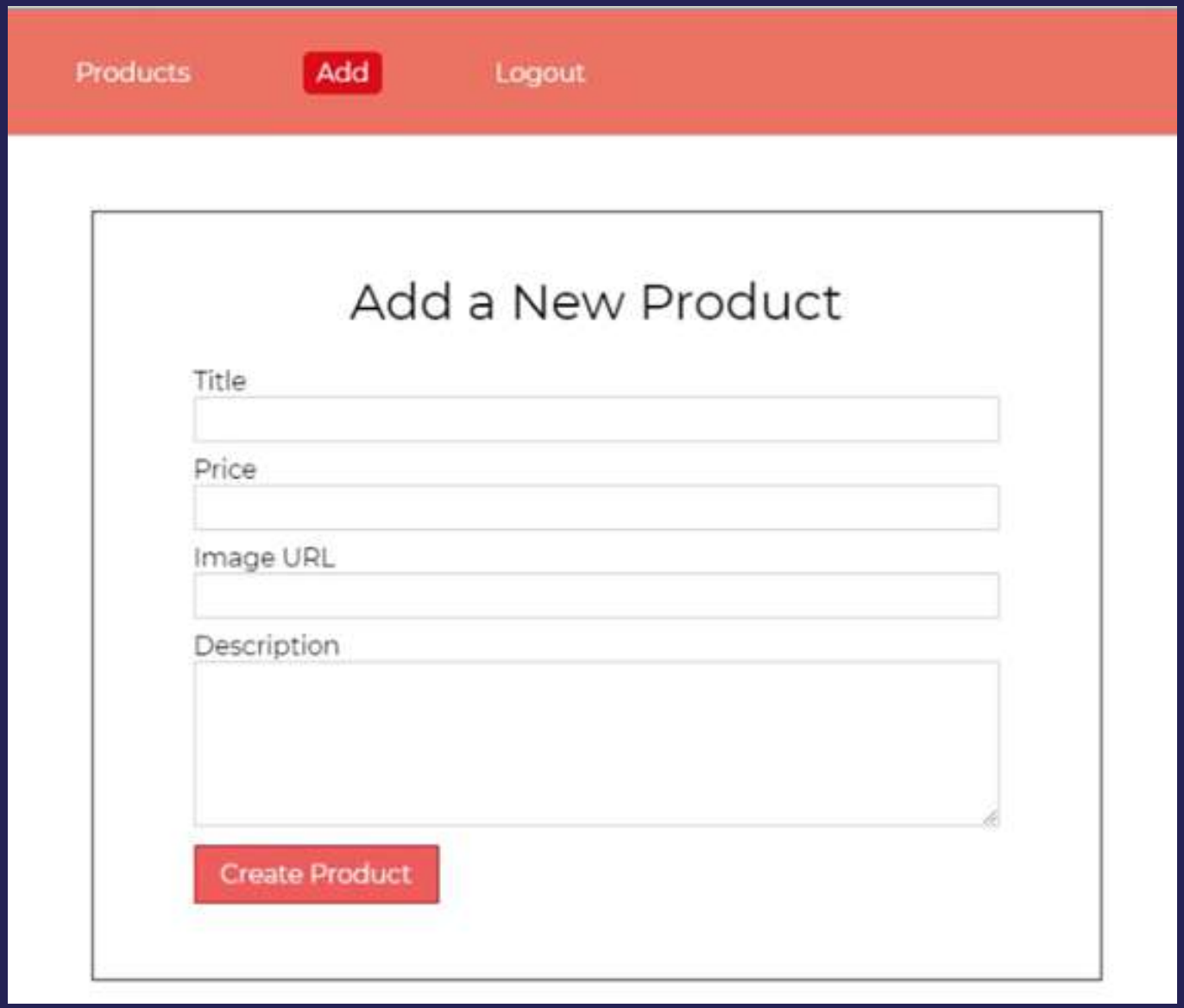
ADMIN VIEW: (LOGIN PAGE)

This feature is for admins only to update the Pizza's menu and add new items to the list. Here, admin will be provided a specific email id and a password that they can use. This info. will be stored in database every time they logged in.





Adding a product feature:



Products Add Logout

Add a New Product

Title

Tandoori Paneer

Price

18

Image URL

https://api.pizzahut.io/v1/content/en-in/in-1/images/pizza/tandc

Description

Spiced paneer, Onion, Green Capsicum & Red Paprika in Tandoori Sauce

Update Product

Added Pizza Items:

Authenticate

Chicken Golden Delight

$22

Mmm! Barbeque chicken with a topping of golden corn loaded with extra cheese. Worth its weight in gold!

Italian Pizza

$20

Double Cheese Italian Pizza

Tandoori Paneer

$18

Spiced paneer, Onion, Green Capsicum & Red Paprika in Tandoori Sauce

DBMS Theory & Implementation:

ER Model, when conceptualized into diagrams, gives a good overview of entity-relationship, which is easier to understand. ER diagrams can be mapped to relational schema. We cannot import all the ER constraints into relational model, but an approximate schema can be generated.

There are several processes and algorithms available to convert ER Diagrams into Relational Schema. Some of them are automated and some of them are manual. We may focus here on the mapping diagram contents to relational basics.

NORMALIZATION:

Database normalization is the process of structuring a database, usually a relational database, in accordance with a series of normal forms in order to reduce data redundancy and improve data integrity.

Normalization entails organizing the columns (attributes) and tables (relations) of a database to ensure that their dependencies are properly enforced by database integrity constraints. It is accomplished by applying some formal rules either by a process of synthesis (creating a new database design) or decomposition (improving an existing database design).

Information stored in Database:

mongoDB

db.getCollection('products').fin...

New Connection | localhost:27017 | PizzaDB

```
db.getCollection('products').find({})
```

products | 0.037 sec. | 0 | 50

	_id	name	description	price	image
1	ObjectId("60bce...	Italian Pizza	Double Cheese Italian Pizza	20	...
2	ObjectId("60bd5...	Double Cheese Margherita	The ever-popular Margherita - loaded with extra cheese... oodies o...	15	...
3	ObjectId("60c06...	Chicken Golden Delight	Mmm! Barbeque chicken with a topping of golden corn loaded wi...	22	https://www.dominos.co.in/files/items/...
4	ObjectId("60c87...	Tandoori Paneer	Spiced paneer, Onion, Green Capsicum & Red Paprika in Tandoori ...	18	https://api.pizzahut.io/v1/content/en-in/in-1/images/pizz...
5	ObjectId("60c87...	Country Feast	Herbed Onion & Green capsicum, Sweet Corn, Tomato, Mushroom	15	https://api.pizzahut.io/v1/content/en-in/in-1/images/pizz...

INSERT IN DATABASE:

Insert Document

localhost:27017 PizzaDB products

```
{
    "name" : "Spiced Paneer",
    "description" : "Masala Paneer, Onion, Tomato",
    "price" : NumberDecimal("12"),
    "image" :
"https://api.pizzahut.io/v1/content/en-in/in-1/images/pizza/spiced-paneer.fc7440f
47b09623563e03a8408749bef.1.jpg"
}
```

Validate Save Cancel

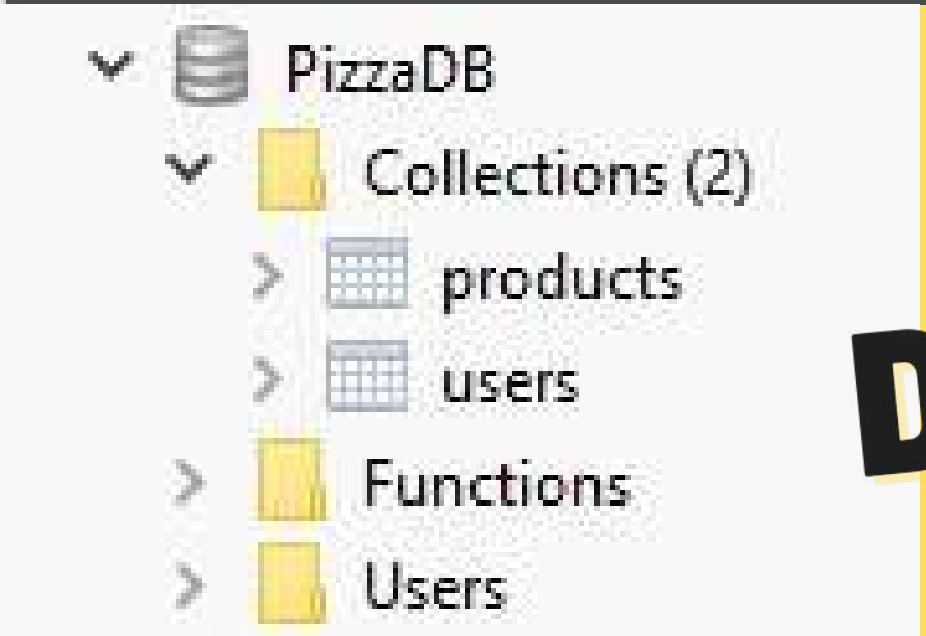
DELETE IN DATABASE:

New Connection localhost:27017 PizzaDB

```
db.getCollection('products').remove({ "_id" : ObjectId("60c88a53b2cdbf18103f1524")})
```

0.006 sec.

```
Removed 1 record(s) in 6ms
```



DATABASE:

UPDATE IN DATABASE:

* db.getCollection('products').u... | db.getCollection('products').find...

New Connection | localhost:27017 | PizzaDB

```
db.getCollection('products').update(
    // query
    {
        "_id" : ObjectId("60c88a53b2cdbf18103f1524")
    },

    // update
    {
        "price" : "12"
    },

    // options
    {
        "multi" : false,  // update only one document
        "upsert" : false  // insert a new document, if no existing document match the query
    }
);
```

0.085 sec.

```
Updated 1 existing record(s) in 84ms
```

WEBSITE VIDEO DEMO:

https://drive.google.com/file/d/1GZiJTGevtVFBOuBm0w_X1ls5s9tOIM7F/view

Thank You