

CPSC 304 Project Cover Page

Milestone #: 3

Date: March 6, 2024

Group Number: 9

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

[Link to the project](#)

SQL DDL Drop Table and Insert Statements:

```
<?php

function dropTables($connection) {
    $dropTables = "
        DROP TABLE IF EXISTS Reviews CASCADE;
        DROP TABLE IF EXISTS Posts CASCADE;
        DROP TABLE IF EXISTS Utilizes CASCADE;
        DROP TABLE IF EXISTS UserRanking CASCADE;
        DROP TABLE IF EXISTS Participates CASCADE;
        DROP TABLE IF EXISTS Follows CASCADE;
        DROP TABLE IF EXISTS Contains CASCADE;
        DROP TABLE IF EXISTS Ingredient CASCADE;
        DROP TABLE IF EXISTS Video CASCADE;
        DROP TABLE IF EXISTS Recipe CASCADE;
        DROP TABLE IF EXISTS RecipeDetails CASCADE;
        DROP TABLE IF EXISTS CookingEquipmentName CASCADE;
        DROP TABLE IF EXISTS CookingEquipment CASCADE;
        DROP TABLE IF EXISTS Review CASCADE;
        DROP TABLE IF EXISTS ReviewDetails CASCADE;
        DROP TABLE IF EXISTS EventDetails CASCADE;
        DROP TABLE IF EXISTS EventLocation CASCADE;
        DROP TABLE IF EXISTS Leaderboard CASCADE;
        DROP TABLE IF EXISTS ProfessionalChef CASCADE;
        DROP TABLE IF EXISTS ProfessionalChefSkill CASCADE;
        DROP TABLE IF EXISTS HomeCook CASCADE;
        DROP TABLE IF EXISTS AppUser CASCADE;
        DROP TABLE IF EXISTS UserDetails CASCADE;
    ";

    try {
        $connection->beginTransaction();
        $connection->exec($dropTables);
        $connection->commit();
        echo "<p>All tables dropped successfully.</p>\n";
    }
}
```

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```
} catch (PDOException $e) {
    $connection->rollBack();
    die("Error dropping tables: " . $e->getMessage());
}

}

function createTables($connection){
    $intilizetables =

    "CREATE TABLE IF NOT EXISTS UserDetails (
        NumberOfFollowers INTEGER DEFAULT 0,
        NumberOfFollowing INTEGER DEFAULT 0,
        Age INTEGER NOT NULL,
        Username VARCHAR(30),
        Password VARCHAR(255),
        PRIMARY KEY (Username, Password)
    );

    CREATE TABLE IF NOT EXISTS AppUser (
        Username VARCHAR (30) NOT NULL UNIQUE,
        Password VARCHAR (255) NOT NULL,
        UserID INTEGER,
        PRIMARY KEY (UserID),
        FOREIGN KEY (UserName, Password) REFERENCES UserDetails(UserName,
Password)

        ON DELETE CASCADE
        ON UPDATE CASCADE

    );

    CREATE TABLE IF NOT EXISTS HomeCook (
        FavouriteCuisine VARCHAR (30),
        HobbyistLevel VARCHAR(30) DEFAULT 'Amateur',
        UserID INTEGER,
        PRIMARY KEY (UserID),
        FOREIGN KEY (UserID) REFERENCES AppUser
        ON DELETE CASCADE ON UPDATE CASCADE
    );

    CREATE TABLE IF NOT EXISTS ProfessionalChefSkill (
        RestaurantAffiliation VARCHAR (30),
        RestaurantLocation VARCHAR (30),
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```
Certification VARCHAR (30),
PRIMARY KEY (RestaurantAffiliation, RestaurantLocation)
);

CREATE TABLE IF NOT EXISTS ProfessionalChef (
    RestaurantAffiliation VARCHAR (30),
    RestaurantLocation VARCHAR (30),
    UserID INTEGER,
    PRIMARY KEY (UserID),
    FOREIGN KEY (UserID) REFERENCES AppUser
    ON DELETE CASCADE ON UPDATE CASCADE,
    FOREIGN KEY (RestaurantAffiliation, RestaurantLocation)
REFERENCES ProfessionalChefSkill
    ON DELETE CASCADE ON UPDATE CASCADE
);

CREATE TABLE IF NOT EXISTS Leaderboard (
    LeaderboardCategory VARCHAR (30) NOT NULL UNIQUE,
    Prize VARCHAR (30),
    PRIMARY KEY (LeaderboardCategory)
);

CREATE TABLE IF NOT EXISTS EventLocation (
    Category VARCHAR (30),
    EntryFee INTEGER,
    Location VARCHAR (30) NOT NULL,
    PRIMARY KEY (Category, EntryFee)
);

CREATE TABLE IF NOT EXISTS EventDetails (
    Category VARCHAR (30) NOT NULL,
    EntryFee INTEGER,
    EventID VARCHAR (30),
    Date VARCHAR (30),
    PRIMARY KEY (EventID),
    FOREIGN KEY (Category, EntryFee) REFERENCES EventLocation ON
DELETE CASCADE ON UPDATE CASCADE
);
```

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```
CREATE TABLE IF NOT EXISTS ReviewDetails (  
    TimePosted DATE,  
    Comment VARCHAR (30),  
    Rating INTEGER DEFAULT 0,  
    PRIMARY KEY (TimePosted, Comment)  
);  
  
CREATE TABLE IF NOT EXISTS Review (  
    TimePosted DATE NOT NULL,  
    Comment VARCHAR (30),  
    ReviewID INTEGER,  
    PRIMARY KEY (ReviewID),  
    FOREIGN KEY (TimePosted, Comment) REFERENCES ReviewDetails  
    ON DELETE CASCADE  
    ON UPDATE CASCADE  
);  
  
CREATE TABLE IF NOT EXISTS CookingEquipment (  
    Price INTEGER ,  
    Category VARCHAR (30),  
    Quality VARCHAR (30),  
    Brand VARCHAR (20) NOT NULL,  
    PRIMARY KEY (Price, Category, Quality)  
);  
  
CREATE TABLE IF NOT EXISTS CookingEquipmentName (  
    Name VARCHAR (30),  
    Price INTEGER ,  
    Category VARCHAR (30),  
    Quality VARCHAR (30),  
    PRIMARY KEY (Name, Price, Category, Quality),  
    FOREIGN KEY (Price, Category, Quality) REFERENCES  
CookingEquipment  
    ON DELETE CASCADE  
    ON UPDATE CASCADE  
);  
  
CREATE TABLE IF NOT EXISTS RecipeDetails (  
    PublishDate DATE,  
    Title VARCHAR (20),  
    Description VARCHAR (200),
```

```
        Culture VARCHAR (20) NOT NULL,
        Difficulty VARCHAR (20) NOT NULL,
        Serving INTEGER,
        PRIMARY KEY (PublishDate, Title)
    );

CREATE TABLE IF NOT EXISTS Recipe (
    RecipeID INTEGER ,
    PublishDate DATE NOT NULL,
    EstimatedTime INTEGER NOT NULL,
    Title VARCHAR (20) NOT NULL,
    PRIMARY KEY (RecipeID),
    FOREIGN KEY (PublishDate, Title) REFERENCES RecipeDetails
    ON DELETE CASCADE
    ON UPDATE CASCADE
);

CREATE TABLE IF NOT EXISTS Video (
    Name VARCHAR (30),
    UploadTime DATE,
    RecipeID INTEGER,
    VideoURL VARCHAR (100),
    Duration INTEGER NOT NULL,
    Views VARCHAR (30) DEFAULT 0,
    PRIMARY KEY (Name, UploadTime, RecipeID),
    FOREIGN KEY (RecipeID) REFERENCES Recipe
    ON DELETE CASCADE
    ON UPDATE CASCADE
);

CREATE TABLE IF NOT EXISTS Ingredient (
    Name VARCHAR (30),
    AllergenInfo VARCHAR (30) DEFAULT 'None',
    PRIMARY KEY (Name)
);

CREATE TABLE IF NOT EXISTS Contains (
    RecipeID INTEGER,
    Name VARCHAR (30),
    PRIMARY KEY (RecipeID, Name),
    FOREIGN KEY (RecipeID) REFERENCES Recipe
    ON DELETE CASCADE ON UPDATE CASCADE,
    FOREIGN KEY (Name) REFERENCES Ingredient
    ON DELETE CASCADE ON UPDATE CASCADE
);
```

```
);

CREATE TABLE IF NOT EXISTS Follows (
    UserID1 INTEGER,
    UserID2 INTEGER,
    PRIMARY KEY (UserID1, UserID2),
    FOREIGN KEY (UserID1) REFERENCES AppUser
    ON DELETE CASCADE ON UPDATE CASCADE,
    FOREIGN KEY (UserID2) REFERENCES AppUser
    ON DELETE CASCADE ON UPDATE CASCADE
);

CREATE TABLE IF NOT EXISTS Participates (
    UserID INTEGER ,
    EventID VARCHAR(30),
    PRIMARY KEY (UserID, EventID),
    FOREIGN KEY (UserID) REFERENCES AppUser
    ON DELETE CASCADE ON UPDATE CASCADE,
    FOREIGN KEY (EventID) REFERENCES EventDetails
    ON DELETE CASCADE ON UPDATE CASCADE
);

CREATE TABLE IF NOT EXISTS UserRanking (
    UserID INTEGER,
    LeaderboardCategory VARCHAR (30),
    Points INTEGER,
    Position INTEGER,
    PRIMARY KEY (UserID, LeaderboardCategory),
    FOREIGN KEY (UserID) REFERENCES AppUser
    ON DELETE CASCADE ON UPDATE CASCADE,
    FOREIGN KEY (LeaderboardCategory) REFERENCES Leaderboard
    ON DELETE CASCADE ON UPDATE CASCADE
);

CREATE TABLE IF NOT EXISTS Utilizes (
    Name VARCHAR (30),
    Price INTEGER ,
    Category VARCHAR (30),
    Quality VARCHAR (30),

    RecipeID INTEGER,
    PRIMARY KEY (RecipeID, Name, Price, Category, Quality),
    FOREIGN KEY (RecipeID) REFERENCES Recipe
    ON DELETE CASCADE ON UPDATE CASCADE,
    FOREIGN KEY (Name, Price, Category, Quality) REFERENCES
CookingEquipmentName
```

```
        ON DELETE CASCADE
        ON UPDATE CASCADE

    );

    CREATE TABLE IF NOT EXISTS Posts (
        RecipeID INTEGER,
        UserID INTEGER,
        PRIMARY KEY (RecipeID, UserID),
        FOREIGN KEY (RecipeID) REFERENCES Recipe
            ON DELETE CASCADE ON UPDATE CASCADE,
        FOREIGN KEY (UserID) REFERENCES AppUser
            ON DELETE CASCADE ON UPDATE CASCADE
    );

    CREATE TABLE IF NOT EXISTS Reviews (
        RecipeID INTEGER,
        ReviewID INTEGER,
        UserID INTEGER,
        PRIMARY KEY (ReviewID, UserID, RecipeID),
        FOREIGN KEY (ReviewID) REFERENCES Review
            ON DELETE CASCADE ON UPDATE CASCADE,
        FOREIGN KEY (UserID) REFERENCES AppUser
            ON DELETE CASCADE ON UPDATE CASCADE,
        FOREIGN KEY (RecipeID) REFERENCES Recipe
            ON DELETE CASCADE ON UPDATE CASCADE
    );
";

$connection->beginTransaction();
$connection->exec($intilizetables);

$connection->commit();

}

function sampleData($connection){
$insertQuery = "INSERT INTO UserDetails (NumberOfFollowers,
NumberOfFollowing, Age, Username, Password)
VALUES
(100, 50, 25, 'jacky', '110'),
(200, 75, 30, 'safiullah', '320'),
(150, 60, 28, 'mohammad', '310'),
(120, 45, 22, 'seva', '221'),
```


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```
(80, 35, 27, 'raymond', '304'),  
(145, 90, 89, 'nafis', '304'),  
(89, 453, 43, 'gregor', '110'),  
(57, 329, 71, 'clune', '340'),  
(67, 78, 56, 'feeley', '213'),  
(98, 46, 32, 'holmes', '310'),  
(87, 20, 102, 'pottinger', '304'),  
(68, 198, 125, 'wolfman', '313'),  
(56, 980, 98, 'jordon', '213'),  
(110, 589, 75, 'geoffrey', '121'),  
(120, 437, 32, 'bradley', '320'),  
(89, 84938, 43, 'cinda', '221'),  
(96, 473827483, 87, 'carter', '210'),  
(48, 2490, 12, 'patrice', '313'),  
(82, 437843, 35, 'ratna', '295'),  
(102, 3848, 23, 'anton', '999')";
```

```
$insertQuery2 = "INSERT INTO AppUser (Username, Password, UserID)  
VALUES
```

```
('jacky', '110', 1),  
( 'safiullah', '320', 2),  
( 'mohammad', '310', 3),  
( 'seva', '221', 4),  
( 'raymond', '304', 5),  
( 'nafis', '304', 6),  
( 'gregor', '110', 7),  
( 'clune', '340', 8),  
( 'feeley', '213', 9),  
( 'holmes', '310', 10),  
( 'pottinger', '304', 11),  
( 'wolfman', '313', 12),  
( 'jordon', '213', 13),  
( 'geoffrey', '121', 14),  
( 'bradley', '320', 15),  
( 'cinda', '221', 16),  
( 'carter', '210', 17),  
( 'patrice', '313', 18),  
( 'ratna', '295', 19),  
( 'anton', '999', 20)";
```

```
$insertQuery5 = "INSERT INTO HomeCook (FavouriteCuisine, HobbyistLevel,  
UserID)
```

```
VALUES
```

```
('Italian', 'Amateur', 1),
```

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```
('Mexican', 'Intermediate', 2),
('Japanese', 'Advanced', 3),
('Italian', 'Amateur', 4),
('British', 'Advanced', 5)";

$insertQuery7 = "INSERT INTO ProfessionalChefSkill (RestaurantAffiliation,
RestaurantLocation, Certification)
VALUES
('Restaurant1', 'Location1', 'Chef Certification 1'),
('Restaurant2', 'Location2', 'Chef Certification 2'),
('Restaurant3', 'Location3', 'Chef Certification 3'),
('Restaurant4', 'Location4', 'Chef Certification 4'),
('Restaurant5', 'Location5', 'Chef Certification 5')";

$insertQuery6 = "INSERT INTO ProfessionalChef (RestaurantAffiliation,
RestaurantLocation, UserID)
VALUES
('Restaurant1', 'Location1', 6),
('Restaurant2', 'Location2', 7),
('Restaurant3', 'Location3', 8),
('Restaurant4', 'Location4', 9),
('Restaurant5', 'Location5', 10),
('Restaurant1', 'Location1', 11),
('Restaurant2', 'Location2', 12),
('Restaurant3', 'Location3', 13),
('Restaurant4', 'Location4', 14),
('Restaurant5', 'Location5', 15),
('Restaurant1', 'Location1', 16),
('Restaurant2', 'Location2', 17),
('Restaurant3', 'Location3', 18),
('Restaurant4', 'Location4', 19),
('Restaurant5', 'Location5', 20)";

$insertQuery9 = "INSERT INTO Leaderboard (LeaderboardCategory, Prize)
VALUES
('Global', 'Exclusive Cooking Set'),
('National', 'Cookbook Collection'),
('Regional', 'Kitchen Appliance Bundle')";

$insertQuery10 = "INSERT INTO EventLocation (Category, EntryFee, Location)
VALUES
('Cooking Competition', 50, 'City A'),
```

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```
('Baking Workshop', 30, 'City B'),
('Food Festival', 20, 'City C'),
('Culinary Tour', 40, 'City D'),
('Wine Tasting', 60, 'City E'),
('Sushi Making Class', 40, 'City F'),
('Pizza Workshop', 25, 'City G'),
('BBQ Cookout', 35, 'City H'),
('Dessert Masterclass', 45, 'City I'),
('Vegetarian Cooking Class', 30, 'City J'),
('Wine and Cheese Pairing', 55, 'City K'),
('Gourmet Dinner', 70, 'City L'),
('Street Food Festival', 15, 'City M'),
('Cocktail Mixology Workshop', 50, 'City N'),
('Farm-to-Table Experience', 65, 'City O');
```

```
$insertQuery11 = "INSERT INTO EventDetails (Category, EntryFee, EventID,
Date)
```

```
VALUES
```

```
('Cooking Competition', 50, 'event1', '2024-04-15'),
('Baking Workshop', 30, 'event2', '2024-05-10'),
('Food Festival', 20, 'event3', '2024-06-20'),
('Culinary Tour', 40, 'event4', '2024-07-05'),
('Wine Tasting', 60, 'event5', '2024-08-12'),
('Sushi Making Class', 40, 'event6', '2024-09-05'),
('Pizza Workshop', 25, 'event7', '2024-10-10'),
('BBQ Cookout', 35, 'event8', '2024-11-20'),
('Dessert Masterclass', 45, 'event9', '2024-12-15'),
('Vegetarian Cooking Class', 30, 'event10', '2025-01-05'),
('Wine and Cheese Pairing', 55, 'event11', '2025-02-10'),
('Gourmet Dinner', 70, 'event12', '2025-03-20'),
('Street Food Festival', 15, 'event13', '2025-04-15'),
('Cocktail Mixology Workshop', 50, 'event14', '2025-05-10'),
('Farm-to-Table Experience', 65, 'event15', '2025-06-20');
```

```
$insertQuery12 = "INSERT INTO ReviewDetails (TimePosted, Comment, Rating)
VALUES
```

```
('2023-01-01', 'Bad food!', 1),
('2023-02-15', 'Ok service!', 2),
('2023-03-20', 'Delicious dishes.', 3),
('2023-04-10', 'Nice ambiance.', 4),
('2023-05-05', 'Friendly staff.', 5);
```

```
$insertQuery13 = "INSERT INTO Review (TimePosted, Comment, ReviewID)
VALUES
```

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```
('2023-01-01', 'Bad food!', 1),
('2023-02-15', 'Ok service!', 2),
('2023-03-20', 'Delicious dishes.', 3),
('2023-04-10', 'Nice ambiance.', 4),
('2023-05-05', 'Friendly staff.', 5)";

$insertQuery14 = "INSERT INTO CookingEquipment (Price, Category, Quality,
Brand)
VALUES
(50, 'Knives', 'High', 'Brand1'),
(100, 'Pots', 'Medium', 'Brand2'),
(80, 'Blenders', 'High', 'Brand3'),
(120, 'Ovens', 'High', 'Brand4'),
(60, 'Mixers', 'Medium', 'Brand5')";

$insertQuery15 = "INSERT INTO CookingEquipmentName (Name, Price, Category,
Quality)
VALUES
('Knife Set', 50, 'Knives', 'High'),
('Cookware Set', 100, 'Pots', 'Medium'),
('Blender', 80, 'Blenders', 'High'),
('Oven', 120, 'Ovens', 'High'),
('Mixer', 60, 'Mixers', 'Medium')";

$insertQuery16 = "INSERT INTO RecipeDetails (PublishDate, Title,
Description, Culture, Difficulty, Serving)
VALUES
('2024-01-01', 'Spaghetti Carbonara', 'Delicious dish with pasta, eggs,
cheese, and pancetta.', 'Italian', 'Intermediate', 4),
('2024-02-15', 'Guacamole', 'Simple and quick recipe for avocado lovers.',
'Mexican', 'Beginner', 2),
('2024-03-20', 'Sushi Rolls', 'Healthy and flavorful meal with fresh
seafood and vegetables.', 'Japanese', 'Advanced', 6),
('2024-04-10', 'Coq au Vin', 'Classic French recipe with chicken cooked in
wine.', 'French', 'Intermediate', 4),
('2024-05-05', 'Gulab Jamun', 'Traditional Indian dessert made with milk
solids and sugar syrup.', 'Indian', 'Expert', 8),
('2024-06-20', 'Kung Pao Chicken', 'Savory and spicy Chinese dish with
peanuts and vegetables.', 'Chinese', 'Intermediate', 5),
('2024-07-15', 'Greek Salad', 'Light and refreshing salad with tomatoes,
cucumbers, and feta cheese.', 'Mediterranean', 'Beginner', 3),
('2024-08-10', 'Clam Chowder', 'Hearty soup made with clams, potatoes, and
cream.', 'American', 'Intermediate', 6),
```

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```
('2024-09-05', 'Thai Green Curry', 'Spicy and flavorful Thai curry with
chicken or vegetables.', 'Thai', 'Advanced', 7),
('2024-10-01', 'Black Forest Cake', 'Decadent chocolate cake with layers
of cherries and whipped cream.', 'Swiss', 'Expert', 10),
('2024-11-10', 'Paneer Tikka Masala', 'Vegetarian Indian dish with
marinated paneer in a creamy tomato sauce.', 'Indian', 'Intermediate', 4),
('2024-12-05', 'Lasagna', 'Classic Italian comfort food with layers of
pasta, cheese, and meat sauce.', 'Italian', 'Beginner', 3),
('2025-01-20', 'Jerk Shrimp', 'Exotic Caribbean dish with spicy jerk
seasoning.', 'Caribbean', 'Advanced', 6),
('2025-02-15', 'Agua Fresca', 'Refreshing Mexican drink made with fruit
and water.', 'Mexican', 'Beginner', 2),
('2025-03-10', 'Sushi Burger', 'Innovative fusion recipe combining sushi
and burger elements.', 'Asian Fusion', 'Intermediate', 5),
('2025-04-05', 'Alfredo Pasta', 'Rich and creamy pasta dish with Parmesan
cheese sauce.', 'Italian', 'Expert', 8),
('2025-05-01', 'Falafel Wrap', 'Light and healthy Mediterranean wrap with
falafel and veggies.', 'Mediterranean', 'Beginner', 2),
('2025-06-20', 'BBQ Ribs', 'Grilled American dish with smoky barbecue
flavors.', 'American', 'Intermediate', 4),
('2025-07-15', 'Chili con Carne', 'Zesty Mexican dish with ground beef,
beans, and spices.', 'Mexican', 'Advanced', 7),
('2025-08-10', 'Crème Brûlée', 'Decadent French dessert with a caramelized
sugar topping.', 'French', 'Expert', 9)";
```

```
$insertQuery17 = "INSERT INTO Recipe (RecipeID, PublishDate,
EstimatedTime, Title)
```

```
VALUES
```

```
(1, '2024-01-01', 60, 'Spaghetti Carbonara'),
(2, '2024-02-15', 30, 'Guacamole'),
(3, '2024-03-20', 90, 'Sushi Rolls'),
(4, '2024-04-10', 45, 'Coq au Vin'),
(5, '2024-05-05', 120, 'Gulab Jamun'),
(6, '2024-06-20', 75, 'Kung Pao Chicken'),
(7, '2024-07-15', 20, 'Greek Salad'),
(8, '2024-08-10', 60, 'Clam Chowder'),
(9, '2024-09-05', 90, 'Thai Green Curry'),
(10, '2024-10-01', 180, 'Black Forest Cake'),
(11, '2024-11-10', 40, 'Paneer Tikka Masala'),
(12, '2024-12-05', 30, 'Lasagna'),
(13, '2025-01-20', 120, 'Jerk Shrimp'),
(14, '2025-02-15', 15, 'Agua Fresca'),
(15, '2025-03-10', 60, 'Sushi Burger'),
(16, '2025-04-05', 90, 'Alfredo Pasta'),
```

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```
(17, '2025-05-01', 25, 'Falafel Wrap'),
(18, '2025-06-20', 45, 'BBQ Ribs'),
(19, '2025-07-15', 75, 'Chili con Carne'),
(20, '2025-08-10', 150, 'Crème Brûlée');"

$insertQuery18 = "INSERT INTO Video (Name, UploadTime, RecipeID, VideoURL,
Duration, Views)
VALUES
('Video1', '2024-01-01', 1, 'https://example.com/video1', 120, '1000'),
('Video2', '2024-02-15', 2, 'https://example.com/video1', 90, '800'),
('Video3', '2024-03-20', 3, 'https://example.com/video1', 150, '1200'),
('Video4', '2024-04-10', 4, 'https://example.com/video1', 60, '500'),
('Video5', '2024-05-05', 5, 'https://example.com/video1', 180, '1500');"

$insertQuery19 = "INSERT INTO Ingredient (Name, AllergenInfo)
VALUES
('Flour', 'Gluten'),
('Sugar', 'None'),
('Eggs', 'None'),
('Butter', 'Dairy'),
('Salt', 'None');"

$insertQuery20 = "INSERT INTO Follows (UserID1, UserID2)
VALUES
(1, 2),
(2, 3),
(3, 4),
(4, 5),
(5, 1),
(6, 7),
(7, 8),
(8, 9),
(9, 10),
(10, 6);"

$insertQuery21 = "INSERT INTO Participates (UserID, EventID)
VALUES
(1, 'event1'),
(1, 'event2'),
(1, 'event3'),
(1, 'event4'),
(1, 'event5'),
(1, 'event6'),
(1, 'event7'),
```

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```
(1, 'event8'),
(1, 'event9'),
(1, 'event10'),
(1, 'event11'),
(1, 'event12'),
(1, 'event13'),
(1, 'event14'),
(1, 'event15'),
(2, 'event1'),
(2, 'event2'),
(2, 'event3'),
(2, 'event4'),
(2, 'event5'),
(2, 'event6'),
(2, 'event7'),
(2, 'event8'),
(2, 'event9'),
(2, 'event10'),
(2, 'event11'),
(2, 'event12'),
(2, 'event13'),
(2, 'event14'),
(2, 'event15'),
(3, 'event1'),
(3, 'event2'),
(3, 'event3'),
(3, 'event4'),
(3, 'event5'),
(3, 'event6'),
(3, 'event7'),
(3, 'event8'),
(3, 'event9'),
(3, 'event10'),
(3, 'event11'),
(3, 'event12'),
(3, 'event13'),
(3, 'event14'),
(3, 'event15'),
(14, 'event2'),
(13, 'event3'),
(4, 'event4'),
(5, 'event5');" ;
```

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```
$insertQuery23 = "INSERT INTO UserRanking (UserID, LeaderboardCategory,
Points,Position)
VALUES
(1, 'Global', 100, 1),
(2, 'Global', 90,2),
(3, 'Global', 80,3),
(4, 'Global', 70,4),
(5, 'Global', 60,5),
(6, 'National', 100, 1),
(7, 'National', 90,2),
(8, 'National', 80,3),
(9, 'National', 70,4),
(10, 'National', 60,5),
(11, 'Regional', 100, 1),
(12, 'Regional', 90,2),
(13, 'Regional', 80,3),
(14, 'Regional', 70,4),
(15, 'Regional', 60,5)";
```

```
$insertQuery24 = "INSERT INTO Utilizes (Name, Price, Category, Quality,
RecipeID)
VALUES
('Knife Set', 50, 'Knives', 'High', 1),
('Cookware Set', 100, 'Pots', 'Medium', 2),
('Blender', 80, 'Blenders', 'High', 3),
('Oven', 120, 'Ovens', 'High', 4),
('Mixer', 60, 'Mixers', 'Medium', 5)";
```

```
$insertQuery25 = "INSERT INTO Posts (RecipeID, UserID)
VALUES
(1, 1),
(2, 2),
(3, 3),
(4, 4),
(5, 5)";
```

```
$connection->beginTransaction();
```

```
$connection->exec($insertQuery);
```

```
echo "<p>Inserted into UserDetails table.</p>\n";
```

```
$connection->exec($insertQuery2);
```

```
echo "<p>Inserted into AppUser table.</p>\n";
```


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```
$connection->exec($insertQuery5);
echo "<p>Inserted into HomeCookDetails table.</p>\n";

$connection->exec($insertQuery7);
echo "<p>Inserted into ProfessionalChefSkill table.</p>\n";

$connection->exec($insertQuery6);
echo "<p>Inserted into ProfessionalChef table.</p>\n";

$connection->exec($insertQuery9);
echo "<p>Inserted into Leaderboard table.</p>\n";

$connection->exec($insertQuery10);
echo "<p>Inserted into EventLocation table.</p>\n";

$connection->exec($insertQuery11);
echo "<p>Inserted into EventDetails table.</p>\n";

$connection->exec($insertQuery12);
echo "<p>Inserted into ReviewDetails table.</p>\n";

$connection->exec($insertQuery13);
echo "<p>Inserted into Review table.</p>\n";

$connection->exec($insertQuery14);
echo "<p>Inserted into CookingEquipment table.</p>\n";

$connection->exec($insertQuery15);
echo "<p>Inserted into CookingEquipmentName table.</p>\n";

$connection->exec($insertQuery16);
echo "<p>Inserted into RecipeDetails table.</p>\n";

$connection->exec($insertQuery17);
echo "<p>Inserted into Recipe table.</p>\n";

$connection->exec($insertQuery18);
echo "<p>Inserted into Video table.</p>\n";

$connection->exec($insertQuery19);
echo "<p>Inserted into Ingredient table.</p>\n";

$connection->exec($insertQuery20);
```

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```
echo "<p>Inserted into Follows table.</p>\n";

$connection->exec($insertQuery21);
echo "<p>Inserted into Participates table.</p>\n";

$connection->exec($insertQuery23);
echo "<p>Inserted into UserRanking table.</p>\n";

$connection->exec($insertQuery24);
echo "<p>Inserted into Utilizes table.</p>\n";

$connection->exec($insertQuery25);
echo "<p>Inserted into Posts table.</p>\n";

$connection->commit();
echo "<p>All data inserted successfully.</p>\n";

}
```

Summary of Project:

The project is a community-centric cooking recipe platform, allowing users to access recipes from professional chefs, attend competitive events to earn points, and review recipes. Real-life applications include assisting home cooks in meal planning, chefs sharing signature recipes, and users with dietary needs finding suitable recipes. The database functionality includes analyzing user preferences and event popularity, while the application platform uses JavaScript, HTML, CSS for the front-end, PHP for the backend, and PostgreSQL for the Database Management System (DBMS).

SCHEMAS

UserDetails (*Username*, Password, NumberOfFollowers, NumberOfFollowing, Age)

AppUser (**UserID**, Username, Password)

HomeCook (**UserID**, FavouriteCuisine, HobbyistLevel)

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ProfessionalChefSkill (RestaurantAffiliation , RestaurantLocation, Certification)

ProfessionalChef (UserID, RestaurantAffiliation, RestaurantLocation)

Leaderboard (LeaderboardCategory, Prize)

EventLocation (Category, EntryFee, Location)

EventDetails (EventID, Category, EntryFee, Date)

ReviewDetails (TimePosted, Comment , Rating)

Review (ReviewID, TimePosted, Comment)

CookingEquipment (Price, Category, Quality, Brand)

CookingEquipmentName (Name, Price, Category, Quality)

RecipeDetails (PublishDate: DATE, Title: VARCHAR(20), Description: VARCHAR(200), Culture: VARCHAR(20) NOT NULL, Difficulty: VARCHAR(20) NOT NULL, Serving: INTEGER, PRIMARY KEY (PublishDate, Title))

Recipe (RecipeID, PublishDate, EstimatedTime, Title)

Video (Name, UploadTime, RecipeID, VideoURL, Duration, Views)

Ingredient (Name, AllergenInfo)

Contains (RecipeID, Name)

Follows (UserID1, UserID2)

Participates (UserID, EventID)

UserRanking (UserID, LeaderboardCategory, Points, Position)

Utilizes (Name, Price, Category, Quality, RecipeID)

Posts (RecipeID, UserID)

Reviews (ReviewID, RecipeID, UserID)

The schema differed from the one we submitted earlier however the changes we made were quite small ones. It was mainly renaming of the decomposed relations and in some cases where there were issues with the normalization (extra attribute), the relations changed accordingly. There were no cases where there were major changes affecting the wider schema in the project. Some example changes are as follows:

- Cooking equipment 1 and cooking equipment 2 were renamed to CookingEquipment and CookingEquipmentName
- We added a RecipeDescription attribute to the Recipes
- We added a videoURL attribute to Video and update the normalization accordingly

ALL TABLES AND SAMPLE DATA:

```
cpssc304=# \d
```

List of relations

Schema	Name	Type	Owner
public	appuser	table	postgres
public	contains	table	postgres
public	cookingequipment	table	postgres
public	cookingequipmentname	table	postgres
public	eventdetails	table	postgres
public	eventlocation	table	postgres
public	follows	table	postgres
public	homecook	table	postgres
public	ingredient	table	postgres

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```
public | leaderboard          | table | postgres
public | participates            | table | postgres
public | posts                     | table | postgres
public | professionalchef          | table | postgres
public | professionalchefskill     | table | postgres
public | recipe                    | table | postgres
public | recipedetails             | table | postgres
public | review                    | table | postgres
public | reviewdetails             | table | postgres
public | reviews                   | table | postgres
public | userdetails               | table | postgres
public | userranking               | table | postgres
public | utilizes                   | table | postgres
public | video                     | table | postgres
```

(23 rows)

```
cp304=# select * from appuser;
```

```
username | password | userid
```

```
-----+-----+-----
```

```
jacky    | 110      |      1
```

```
safiullah | 320      |      2
```

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mohammad		310		3
seva		221		4
raymond		304		5
nafis		304		6
gregor		110		7
clune		340		8
feeley		213		9
holmes		310		10
pottinger		304		11
wolfman		313		12
jordon		213		13
geoffrey		121		14
bradley		320		15
cinda		221		16
carter		210		17
patrice		313		18
ratna		295		19
anton		999		20

(20 rows)

```
cpssc304=# select * from contains;
```

```
recipeid | name
```

```
-----+-----
```

```
(0 rows)
```

```
cpsc304=# select * from cookingequipment;
```

```
price | category | quality | brand
```

```
-----+-----+-----+-----
```

```
50 | Knives | High | Brand1
```

```
100 | Pots | Medium | Brand2
```

```
80 | Blenders | High | Brand3
```

```
120 | Ovens | High | Brand4
```

```
60 | Mixers | Medium | Brand5
```

```
(5 rows)
```

```
cpsc304=# select * from cookingequipmentname;
```

```
name | price | category | quality
```

```
-----+-----+-----+-----
```

```
Knife Set | 50 | Knives | High
```

```
Cookware Set | 100 | Pots | Medium
```

```
Blender | 80 | Blenders | High
```

```
Oven | 120 | Ovens | High
```

Mixer		60		Mixers		Medium
(5 rows)						
cpsc304=# select * from eventdetails;						
category			entryfee		eventid	date
-----+-----+-----+-----						
Cooking Competition		50		event1		2024-04-15
Baking Workshop		30		event2		2024-05-10
Food Festival		20		event3		2024-06-20
Culinary Tour		40		event4		2024-07-05
Wine Tasting		60		event5		2024-08-12
Sushi Making Class		40		event6		2024-09-05
Pizza Workshop		25		event7		2024-10-10
BBQ Cookout		35		event8		2024-11-20
Dessert Masterclass		45		event9		2024-12-15
Vegetarian Cooking Class		30		event10		2025-01-05
Wine and Cheese Pairing		55		event11		2025-02-10
Gourmet Dinner		70		event12		2025-03-20
Street Food Festival		15		event13		2025-04-15
Cocktail Mixology Workshop		50		event14		2025-05-10
Farm-to-Table Experience		65		event15		2025-06-20

(15 rows)

cpssc304=# select * from eventlocation;

category		entryfee		location
-----+-----+-----				
Cooking Competition		50		City A
Baking Workshop		30		City B
Food Festival		20		City C
Culinary Tour		40		City D
Wine Tasting		60		City E
Sushi Making Class		40		City F
Pizza Workshop		25		City G
BBQ Cookout		35		City H
Dessert Masterclass		45		City I
Vegetarian Cooking Class		30		City J
Wine and Cheese Pairing		55		City K
Gourmet Dinner		70		City L
Street Food Festival		15		City M
Cocktail Mixology Workshop		50		City N
Farm-to-Table Experience		65		City O

(15 rows)

```
cpssc304=# select * from follows;
```

```
userid1 | userid2
```

```
-----+-----
```

```
1 | 2
```

```
2 | 3
```

```
3 | 4
```

```
4 | 5
```

```
5 | 1
```

```
6 | 7
```

```
7 | 8
```

```
8 | 9
```

```
9 | 10
```

```
10 | 6
```

```
(10 rows)
```

```
cpssc304=# select * from homecook;
```

```
favouritecuisine | hobbyistlevel | userid
```

```
-----+-----+-----
```

```
Italian          | Amateur        | 1
```

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Mexican	Intermediate	2
Japanese	Advanced	3
Italian	Amateur	4
British	Advanced	5

(5 rows)

```
cpsc304=# select * from ingredient;
```

name	allergeninfo
------	--------------

-----+-----

Flour	Gluten
-------	--------

Sugar	None
-------	------

Eggs	None
------	------

Butter	Dairy
--------	-------

Salt	None
------	------

(5 rows)

```
cpsc304=# select * from leaderboard;
```

leaderboardcategory	prize
---------------------	-------

-----+-----

Global	Exclusive Cooking Set
--------	-----------------------

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National | Cookbook Collection

Regional | Kitchen Appliance Bundle

(3 rows)

cpsc304=# \d

List of relations

Schema	Name	Type	Owner
public	appuser	table	postgres
public	contains	table	postgres
public	cookingequipment	table	postgres
public	cookingequipmentname	table	postgres
public	eventdetails	table	postgres
public	eventlocation	table	postgres
public	follows	table	postgres
public	homecook	table	postgres
public	ingredient	table	postgres
public	leaderboard	table	postgres
public	participates	table	postgres
public	posts	table	postgres
public	professionalchef	table	postgres

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```
public | professionalchefskill | table | postgres
public | recipe                | table | postgres
public | recipedetails           | table | postgres
public | review                   | table | postgres
public | reviewdetails             | table | postgres
public | reviews                   | table | postgres
public | userdetails               | table | postgres
public | userranking               | table | postgres
public | utilizes                  | table | postgres
public | video                     | table | postgres
```

(23 rows)

```
cpssc304=# select * from participates;
```

```
userid | eventid
```

```
-----+-----
```

```
1 | event1
```

```
1 | event2
```

```
1 | event3
```

```
1 | event4
```

```
1 | event5
```

```
1 | event6
```

1 | event7

1 | event8

1 | event9

1 | event10

1 | event11

1 | event12

1 | event13

1 | event14

1 | event15

2 | event1

2 | event2

2 | event3

2 | event4

2 | event5

2 | event6

2 | event7

2 | event8

2 | event9

2 | event10

2 | event11

2 | event12

2 | event13

2 | event14

2 | event15

3 | event1

3 | event2

3 | event3

3 | event4

3 | event5

3 | event6

3 | event7

3 | event8

3 | event9

3 | event10

3 | event11

3 | event12

3 | event13

3 | event14

3 | event15

14 | event2

13 | event3

4 | event4

5 | event5

(49 rows)

```
cpssc304=# \d
```

List of relations

Schema	Name	Type	Owner
public	appuser	table	postgres
public	contains	table	postgres
public	cookingequipment	table	postgres
public	cookingequipmentname	table	postgres
public	eventdetails	table	postgres
public	eventlocation	table	postgres
public	follows	table	postgres
public	homecook	table	postgres
public	ingredient	table	postgres
public	leaderboard	table	postgres
public	participates	table	postgres
public	posts	table	postgres
public	professionalchef	table	postgres
public	professionalchefskill	table	postgres
public	recipe	table	postgres
public	recipedetails	table	postgres

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```
public | review          | table | postgres
public | reviewdetails       | table | postgres
public | reviews               | table | postgres
public | userdetails            | table | postgres
public | userranking            | table | postgres
public | utilizes               | table | postgres
public | video                  | table | postgres
```

(23 rows)

```
cpssc304=# select * from posts;
```

```
recipeid | userid
```

```
-----+-----
```

```
1 | 1
```

```
2 | 2
```

```
3 | 3
```

```
4 | 4
```

```
5 | 5
```

(5 rows)

```
cpssc304=# select * from professionalchef;
```

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restaurantaffiliation	restaurantlocation	userid
Restaurant1	Location1	6
Restaurant2	Location2	7
Restaurant3	Location3	8
Restaurant4	Location4	9
Restaurant5	Location5	10
Restaurant1	Location1	11
Restaurant2	Location2	12
Restaurant3	Location3	13
Restaurant4	Location4	14
Restaurant5	Location5	15
Restaurant1	Location1	16
Restaurant2	Location2	17
Restaurant3	Location3	18
Restaurant4	Location4	19
Restaurant5	Location5	20
(15 rows)		
cpssc304=# select * from professionalchefskill;		
restaurantaffiliation	restaurantlocation	certification

-----+-----+-----			

Restaurant1	Location1	Chef Certification	
1			
Restaurant2	Location2	Chef Certification	
2			
Restaurant3	Location3	Chef Certification	
3			
Restaurant4	Location4	Chef Certification	
4			
Restaurant5	Location5	Chef Certification	
5			
(5 rows)			
cpsc304=# select * from recipe;			
recipeid	publishdate	estimatedtime	title
-----+-----+-----			
1	2024-01-01	60	Spaghetti Carbonara
2	2024-02-15	30	Guacamole
3	2024-03-20	90	Sushi Rolls
4	2024-04-10	45	Coq au Vin
5	2024-05-05	120	Gulab Jamun
6	2024-06-20	75	Kung Pao Chicken
7	2024-07-15	20	Greek Salad

8		2024-08-10		60		Clam Chowder
9		2024-09-05		90		Thai Green Curry
10		2024-10-01		180		Black Forest Cake
11		2024-11-10		40		Paneer Tikka Masala
12		2024-12-05		30		Lasagna
13		2025-01-20		120		Jerk Shrimp
14		2025-02-15		15		Agua Fresca
15		2025-03-10		60		Sushi Burger
16		2025-04-05		90		Alfredo Pasta
17		2025-05-01		25		Falafel Wrap
18		2025-06-20		45		BBQ Ribs
19		2025-07-15		75		Chili con Carne
20		2025-08-10		150		Cr�me Br�le�

(20 rows)

cpssc304=# select * from recipedetails;

publishdate		title				culture	
description							
difficulty		serving					

```
-----+-----+-----
-----+-----
+-----+-----
```

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2024-01-01	Spaghetti Carbonara	Delicious dish with pasta, eggs, cheese, and pancetta.	Italian
Intermediate		4	
2024-02-15	Guacamole	Simple and quick recipe for avocado lovers.	Mexican
Beginner		2	
2024-03-20	Sushi Rolls	Healthy and flavorful meal with fresh seafood and vegetables.	Japanese
Advanced		6	
2024-04-10	Coq au Vin	Classic French recipe with chicken cooked in wine.	French
Intermediate		4	
2024-05-05	Gulab Jamun	Traditional Indian dessert made with milk solids and sugar syrup.	Indian
Expert		8	
2024-06-20	Kung Pao Chicken	Savory and spicy Chinese dish with peanuts and vegetables.	Chinese
Intermediate		5	
2024-07-15	Greek Salad	Light and refreshing salad with tomatoes, cucumbers, and feta cheese.	Mediterranean
Beginner		3	
2024-08-10	Clam Chowder	Hearty soup made with clams, potatoes, and cream.	American
Intermediate		6	
2024-09-05	Thai Green Curry	Spicy and flavorful Thai curry with chicken or vegetables.	Thai
Advanced		7	
2024-10-01	Black Forest Cake	Decadent chocolate cake with layers of cherries and whipped cream.	Swiss
Expert		10	
2024-11-10	Paneer Tikka Masala	Vegetarian Indian dish with marinated paneer in a creamy tomato sauce.	Indian
Intermediate		4	

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2024-12-05	Lasagna	Classic Italian comfort food with layers of pasta, cheese, and meat sauce.	Italian
Beginner		3	
2025-01-20	Jerk Shrimp	Exotic Caribbean dish with spicy jerk seasoning.	Caribbean
Advanced		6	
2025-02-15	Agua Fresca	Refreshing Mexican drink made with fruit and water.	Mexican
Beginner		2	
2025-03-10	Sushi Burger	Innovative fusion recipe combining sushi and burger elements.	Asian Fusion
Intermediate		5	
2025-04-05	Alfredo Pasta	Rich and creamy pasta dish with Parmesan cheese sauce.	Italian
Expert		8	
2025-05-01	Falafel Wrap	Light and healthy Mediterranean wrap with falafel and veggies.	
Mediterranean	Beginner		2
2025-06-20	BBQ Ribs	Grilled American dish with smoky barbecue flavors.	American
Intermediate		4	
2025-07-15	Chili con Carne	Zesty Mexican dish with ground beef, beans, and spices.	Mexican
Advanced		7	
2025-08-10	Crème Brûlée	Decadent French dessert with a caramelized sugar topping.	French
Expert		9	

(20 rows)

```
cpssc304=# select * from review;
```

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```
timeposted |      comment      | reviewid
-----+-----+-----
2023-01-01 | Bad food!          |      1
2023-02-15 | Ok service!        |      2
2023-03-20 | Delicious dishes.  |      3
2023-04-10 | Nice ambiance.     |      4
2023-05-05 | Friendly staff.    |      5
(5 rows)
```

```
cpssc304=# select * from reviewdetails;
```

```
timeposted |      comment      | rating
-----+-----+-----
2023-01-01 | Bad food!          |      1
2023-02-15 | Ok service!        |      2
2023-03-20 | Delicious dishes.  |      3
2023-04-10 | Nice ambiance.     |      4
2023-05-05 | Friendly staff.    |      5
(5 rows)
```

```
cpssc304=# select * from userdetails;
```

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numberoffollowers	numberoffollowing	age	username	password
100	50	25	jacky	110
200	75	30	safiullah	320
150	60	28	mohammad	310
120	45	22	seva	221
80	35	27	raymond	304
145	90	89	nafis	304
89	453	43	gregor	110
57	329	71	clune	340
67	78	56	feeley	213
98	46	32	holmes	310
87	20	102	pottinger	304
68	198	125	wolfman	313
56	980	98	jordon	213
110	589	75	geoffrey	121
120	437	32	bradley	320
89	84938	43	cinda	221
96	473827483	87	carter	210
48	2490	12	patrice	313
82	437843	35	ratna	295

102 | 3848 | 23 | anton | 999

(20 rows)

```
cp304=# select * from userranking;
```

userid	leaderboardcategory	points	position
--------	---------------------	--------	----------

userid	leaderboardcategory	points	position
--------	---------------------	--------	----------

1	Global	100	1
2	Global	90	2
3	Global	80	3
4	Global	70	4
5	Global	60	5
6	National	100	1
7	National	90	2
8	National	80	3
9	National	70	4
10	National	60	5
11	Regional	100	1
12	Regional	90	2
13	Regional	80	3
14	Regional	70	4
15	Regional	60	5

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(15 rows)

```
cpssc304=# select * from utilizes;
```

name	price	category	quality	recipeid
Knife Set	50	Knives	High	1
Cookware Set	100	Pots	Medium	2
Blender	80	Blenders	High	3
Oven	120	Ovens	High	4
Mixer	60	Mixers	Medium	5

(5 rows)

```
cpssc304=# select * from video;
```

name	uploadtime	recipeid	videourl	duration	views
Video1	2024-01-01	1	https://example.com/video1	120	1000
Video2	2024-02-15	2	https://example.com/video1	90	800
Video3	2024-03-20	3	https://example.com/video1	150	1200

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```
Video4 | 2024-04-10 |          4 | https://example.com/video1 |
60 | 500

Video5 | 2024-05-05 |          5 | https://example.com/video1 |
180 | 1500

(5 rows)
```

Queries (and their location)

***** PLEASE NOTE:** *The sections below are for each type. Within each section, the query is listed, followed by screenshots that show the before and after from the GUI as well as the changes in data from the table*

INSERT:

From registerprofessionalchef.php:

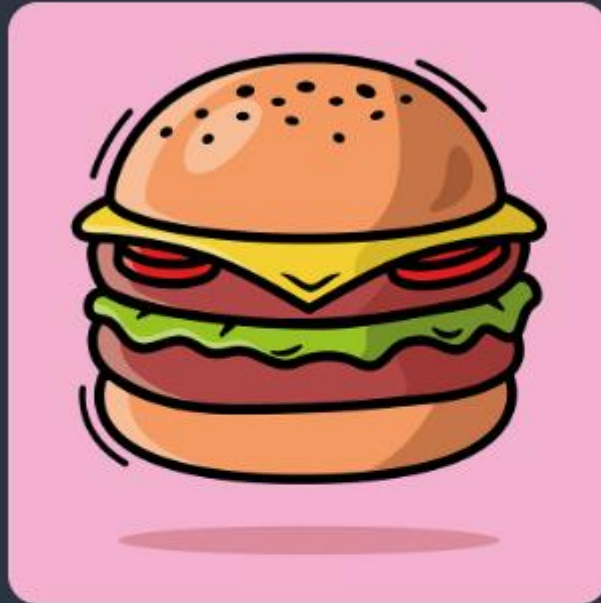
Line 56:

```
$sql ="INSERT INTO ProfessionalChefSkill (RestaurantAffiliation,
RestaurantLocation, Certification) VALUES
(:RestaurantAffiliation,:RestaurantLocation, :Certification)";
```

Line 63:

```
$sql ="INSERT INTO ProfessionalChef (RestaurantAffiliation,
RestaurantLocation, UserID) VALUES
(:RestaurantAffiliation,:RestaurantLocation, :UserID)";
```

Same screenshots for Line 56 and Line 63:



Register to FoodHub

Register as Home Cook



Register as Professional Chef



Continue

Register as Professional Chef

Username

ONE

Password

...

Restaurant Affiliation

wHY

Restaurant Location

here

Certification

none

Age

56

Register



localhost says

Registration successful. You will be redirected to the login page.

OK

```
cpssc304=# select * from userdetails;
 numberoffollowers | numberoffollowing | age | username | password
-----+-----+-----+-----+-----
          100 |          50 | 25 | jacky | 110
          200 |          75 | 30 | safiullah | 320
          150 |          60 | 28 | mohammad | 310
          120 |          45 | 22 | seva | 221
           80 |          35 | 27 | raymond | 304
          145 |          90 | 89 | nafis | 304
           89 |         453 | 43 | gregor | 110
           57 |        329 | 71 | clune | 340
           67 |          78 | 56 | feeley | 213
           98 |          46 | 32 | holmes | 310
           87 |          20 | 102 | pottinger | 304
           68 |         198 | 125 | wolfman | 313
           56 |         980 | 98 | jordon | 213
          110 |         589 | 75 | geoffrey | 121
          120 |         437 | 32 | bradley | 320
           89 |        84938 | 43 | cinda | 221
           96 |       473827483 | 87 | carter | 210
           48 |         2490 | 12 | patrice | 313
           82 |        437843 | 35 | ratna | 295
          102 |         3848 | 23 | anton | 999
           0 |          0 | 56 | ONE | 123
           0 |          0 | 55 | faraz | 123

(22 rows)
```

DELETE:

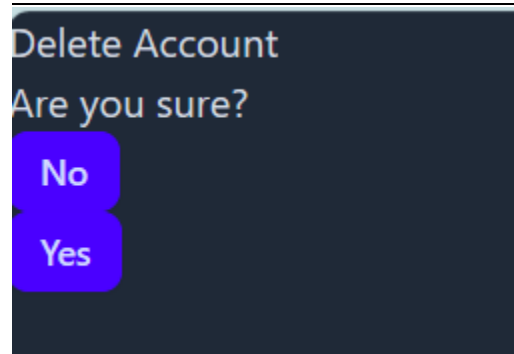
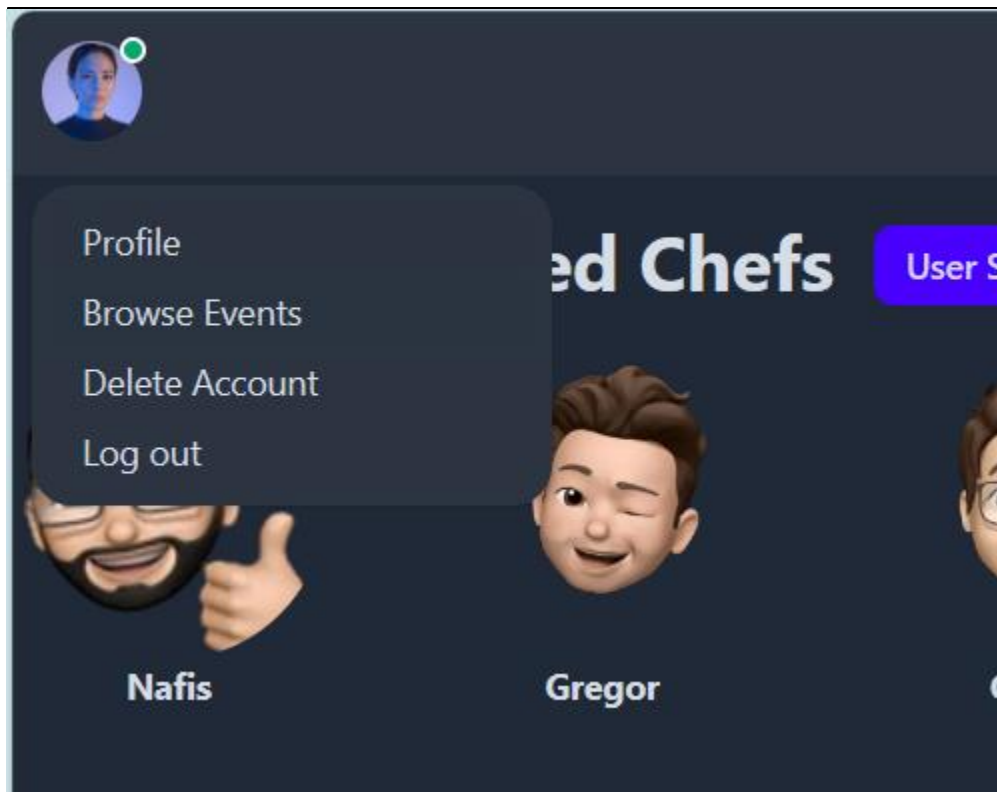
From deleteuser.php

Line 56:

```
$delete = $connection->prepare("DELETE FROM userdetails
                                WHERE username = :username
                                AND password = :password");
```

In the case of deleting the user safiullah:

```
cpsc304=# select * from userdetails;
 numberoffollowers | numberoffollowing | age | username | password
-----+-----+-----+-----+-----
          200 |           75 | 30 | safiullah | 320
          150 |           60 | 28 | mohammad | 310
          120 |           45 | 22 | seva     | 221
           80 |           35 | 27 | raymond  | 304
          145 |           90 | 89 | nafis    | 304
           89 |          453 | 43 | gregor   | 110
           57 |          329 | 71 | clune    | 340
           67 |           78 | 56 | feeley   | 213
           98 |           46 | 32 | holmes   | 310
           87 |           20 | 102 | pottinger | 304
           68 |          198 | 125 | wolfman  | 313
           56 |          980 | 98 | jordon   | 213
          110 |          589 | 75 | geoffrey | 121
          120 |          437 | 32 | bradley  | 320
           89 |         84938 | 43 | cinda    | 221
           96 |        473827483 | 87 | carter   | 210
           48 |          2490 | 12 | patrice  | 313
           82 |         437843 | 35 | ratna    | 295
          102 |          3848 | 23 | anton    | 999
           0 |           0 | 56 | ONE      | 123
           0 |           0 | 55 | faraz    | 123
(21 rows)
```



User successfully deleted. Redirecting to login page...

```
cp304=# select * from userdetails;
```

numberoffollowers	numberoffollowing	age	username	password
150	60	28	mohammad	310
120	45	22	seva	221
80	35	27	raymond	304
145	90	89	nafis	304
89	453	43	gregor	110
57	329	71	clune	340
67	78	56	feeley	213
98	46	32	holmes	310
87	20	102	pottinger	304
68	198	125	wolfman	313
56	980	98	jordon	213
110	589	75	geoffrey	121
120	437	32	bradley	320
89	84938	43	cinda	221
96	473827483	87	carter	210
48	2490	12	patrice	313
82	437843	35	ratna	295
102	3848	23	anton	999
0	0	56	ONE	123
0	0	55	faraz	123

(20 rows)

UPDATE

From updateRecipe.php:

**Both queries below will have the same screenshots

Line 16:

```
$updateRecipeDetails = $connection->prepare("
UPDATE RecipeDetails
SET Description = :description,
```

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```
Culture = :culture,  
Difficulty = :difficulty,  
Serving = :serving  
FROM Recipe  
WHERE RecipeDetails.PublishDate = Recipe.PublishDate  
AND RecipeDetails.Title = Recipe.Title  
AND Recipe.RecipeID = :recipeId
```

Line 37:

```
$updateRecipe = $connection->prepare("UPDATE Recipe SET EstimatedTime =  
:estimatedTime WHERE RecipeID = :recipeId");
```

Choose Recipe to Edit

Recipe:

☐ Sample recipe

Go to editor

Home page

View Recipe

Recipe video



Sample recipe
description

Difficulty level
expert

Culture
Chinese

Servings
5

Prep time
54



PROJECTION


From recipefilter.php

Line 77:

```
$selectedColumnsString = implode(', ', $selectedColumns);  
  
$sql = "SELECT $selectedColumnsString FROM RecipeDetails r JOIN  
Recipe r2 ON r2.title = r.title AND r2.publishdate = r.publishdate";
```

Filter Recipes

[Home](#)



Culture Type:

Chinese ▼

[Search](#)

☐ Title ☐ Publish Date ☐ Description ☐ Culture ☐ Difficulty ☐ Serving ☐ Estimated Time

[Search By fields](#)

Title ▼

 =

[+ Add Condition](#)

[Search with Conditions](#)

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Filter Recipes

[Home](#)

Culture Type:

Chinese

[Search](#)

☐ Title ☐ Publish Date ☐ Description ☒ Culture ☒ Difficulty ☐ Serving ☐ Estimated Time

[Search By fields](#)

Title

=

[+ Add Condition](#)

[Search with Conditions](#)

culture: Italian

difficulty: Intermediate

culture: Mexican

difficulty: Beginner

culture: Japanese

difficulty: Advanced

culture: French

difficulty: Intermediate

culture: Indian

difficulty: Expert

culture: Chinese

difficulty: Intermediate

culture: Mediterranean

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```
cpssc304=# SELECT r.difficulty, r.culture FROM RecipeDetails r JOIN Recipe r2 ON r2.title = r.title AND r2.publishdate = r.publishdate;
  difficulty |  culture
-----+-----
Intermediate | Italian
Beginner     | Mexican
Advanced     | Japanese
Intermediate | French
Expert       | Indian
Intermediate | Chinese
Beginner     | Mediterranean
Intermediate | American
Advanced     | Thai
Expert       | Swiss
Intermediate | Indian
Beginner     | Italian
Advanced     | Caribbean
Beginner     | Mexican
Intermediate | Asian Fusion
Expert       | Italian
Beginner     | Mediterranean
Intermediate | American
Advanced     | Mexican
Expert       | French
expert       | Chinese
(21 rows)
```

SELECTION

From recipefilter.php

Line 114:

```
$sqlConditionStr = implode(' ', $sqlConditions);
                $sql = "SELECT * FROM RecipeDetails r JOIN Recipe r2 ON
r2.title = r.title AND r2.publishdate = r.publishdate WHERE
$sqlConditionStr";
```

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Filter Recipes

Home

Servings

Culture Type:

Chinese

Search

☐ Title ☐ Publish Date ☐ Description ☐ Culture ☐ Difficulty ☐ Serving ☐ Estimated Time

Search By fields


Title =

+ Add Condition

Search with Conditions

Filter Recipes

[Home](#)



Culture Type:

Chinese ▼

[Search](#)

☐ Title ☐ Publish Date ☐ Description ☐ Culture ☐ Difficulty ☐ Serving ☐ Estimated Time

[Search By fields](#)

Serving ▼

=

4

Difficulty ▼

=

Easy

AND ▼

Delete

Culture ▼

=

Chinese

OR ▼

Delete

[+ Add Condition](#)

[Search with Conditions](#)

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Search with Conditions

Title: Kung Pao Chicken

Publish Date: 2024-06-20

Description: Savory and spicy Chinese dish with peanuts and vegetables.

Culture: Chinese

Difficulty: Intermediate

Serving: 5

estimated time: 75

View Recipe

```
cpsc304=# SELECT * FROM RecipeDetails r JOIN Recipe r2 ON r2.title = r.title AND r2.publishdate = r.publishdate WHERE serving = 4 AND difficulty = 'Easy' OR Culture = 'Chinese';
publishdate | title | description | culture | difficulty | serving | recipeid | publishdate | estimatedtime |
-----+-----+-----+-----+-----+-----+-----+-----+-----+
2024-06-20 | Kung Pao Chicken | Savory and spicy Chinese dish with peanuts and vegetables. | Chinese | Intermediate | 5 | 6 | 2024-06-20 | 75 |
Kung Pao Chicken
2024-04-06 | Sample recipe | Sample recipe after editing | Chinese | expert | 5 | 7201 | 2024-04-06 | 554 |
Sample recipe
(2 rows)
```

JOIN

From recipefilter.php

Line 15:

```
if ($culture === 'any') {

    $sql = "SELECT * FROM recipedetails r
            JOIN recipe r2 ON r2.title = r.title AND r2.publishdate =
r.publishdate
            WHERE r.serving >= :serving";
```

Filter Recipes

Home

Servings

Q

Culture Type:

Chinese

Search

Title

Publish Date

Description

Culture

Difficulty

Serving

Estimated Time

Search By fields

Title

=

+ Add Condition

Search with Conditions

```
cp304=# SELECT * FROM recipedetails r
cp304=# JOIN recipe r2 ON r2.title = r.title AND r2.publishdate = r.publishdate
cp304=# WHERE r.serving >= 4;
```

id	publishdate	estimatedtime	title	description	culture	difficulty	serving	recipe			
2024-01-01		Spaghetti Carbonara		Delicious dish with pasta, eggs, cheese, and pancetta.		Italian		Intermediate		4	
1		2024-01-01		60		Spaghetti Carbonara					
2024-03-20		Sushi Rolls		Healthy and flavorful meal with fresh seafood and vegetables.		Japanese		Advanced		6	
3		2024-03-20		90		Sushi Rolls					
2024-04-10		Coq au Vin		Classic French recipe with chicken cooked in wine.		French		Intermediate		4	
4		2024-04-10		45		Coq au Vin					
2024-05-05		Gulab Jamun		Traditional Indian dessert made with milk solids and sugar syrup.		Indian		Expert		8	
5		2024-05-05		120		Gulab Jamun					
2024-06-20		Kung Pao Chicken		Savory and spicy Chinese dish with peanuts and vegetables.		Chinese		Intermediate		5	
6		2024-06-20		75		Kung Pao Chicken					
2024-08-10		Clam Chowder		Hearty soup made with clams, potatoes, and cream.		American		Intermediate		6	
8		2024-08-10		60		Clam Chowder					
2024-09-05		Thai Green Curry		Spicy and flavorful Thai curry with chicken or vegetables.		Thai		Advanced		7	
9		2024-09-05		90		Thai Green Curry					
2024-10-01		Black Forest Cake		Decadent chocolate cake with layers of cherries and whipped cream.		Swiss		Expert		10	
10		2024-10-01		180		Black Forest Cake					
2024-11-10		Paneer Tikka Masala		Vegetarian Indian dish with marinated paneer in a creamy tomato sauce.		Indian		Intermediate		4	
11		2024-11-10		40		Paneer Tikka Masala					
2025-01-20		Jerk Shrimp		Exotic Caribbean dish with spicy jerk seasoning.		Caribbean		Advanced		6	
13		2025-01-20		120		Jerk Shrimp					
2025-03-10		Sushi Burger		Innovative fusion recipe combining sushi and burger elements.		Asian Fusion		Intermediate		5	
15		2025-03-10		60		Sushi Burger					
2025-04-05		Alfredo Pasta		Rich and creamy pasta dish with Parmesan cheese sauce.		Italian		Expert		8	
16		2025-04-05		90		Alfredo Pasta					
2025-06-20		BBQ Ribs		Grilled American dish with smoky barbecue flavors.		American		Intermediate		4	
18		2025-06-20		45		BBQ Ribs					
2025-07-15		Chili con Carne		Zesty Mexican dish with ground beef, beans, and spices.		Mexican		Advanced		-- More --	

Filter Recipes

[Home](#)

Culture Type:

Any

Search

☐ Title ☐ Publish Date ☐ Description ☐ Culture ☐ Difficulty ☐ Serving ☐ Estimated Time

Search By fields

Title

 =

+ Add Condition

Search with Conditions

Title: Spaghetti Carbonara
Publish Date: 2024-01-01
Description: Delicious dish with pasta, eggs, cheese, and pancetta.
Culture: Italian
Difficulty: Intermediate
Serving: 4
estimated time: 60
View Recipe

Title: Sushi Rolls
Publish Date: 2024-03-20
Description: Healthy and flavorful meal with fresh seafood and vegetables.

AGGREGATION WITH GROUP BY

From recipefilter.php Line 22:

```
$sql = "SELECT *
        FROM recipedetails r, (
            SELECT culture
            FROM recipedetails
            GROUP BY culture
            HAVING culture = :culture AND MIN(serving) >=
:serving
        ) c, recipe r2"
```

```
WHERE c.culture = r.culture
AND r2.title = r.title
AND r2.publishdate = r.publishdate";
}
```

Filter Recipes

Home

Servings

Q

Culture Type:

Chinese

▼

Search

☐ Title

☐ Publish Date

☐ Description

☐ Culture

☐ Difficulty

☐ Serving

☐ Estimated Time

Search By fields

Title

▼

=

+ Add Condition

Search with Conditions

We type 5 servings and choose the Chinese culture type and get the results below

```
cpssc304=# SELECT *
cpssc304-#          FROM recipedetails r, (
cpssc304(#          SELECT culture
cpssc304(#          FROM recipedetails
cpssc304(#          GROUP BY culture
cpssc304(#          HAVING culture = 'Chinese' AND MIN(serving) ≥ 5
cpssc304(#          ) c, recipe r2
cpssc304-#          WHERE c.culture = r.culture
cpssc304-#          AND r2.title = r.title
cpssc304-#          AND r2.publishdate = r.publishdate;
publishdate | title | description | culture | difficulty | serving | culture | recipeid | publishdate | estim
atedtime | title
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----
2024-06-20 | Kung Pao Chicken | Savory and spicy Chinese dish with peanuts and vegetables. | Chinese | Intermediate | 5 | Chinese | 6 | 2024-06-20 | 
75 | Kung Pao Chicken
2024-04-06 | Sample recipe | Sample recipe after editing | Chinese | expert | 5 | Chinese | 7201 | 2024-04-06 | 
554 | Sample recipe
(2 rows)
```

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Filter Recipes

Home

5

Culture Type:

Chinese

Search

☐ Title ☐ Publish Date ☐ Description ☐ Culture ☐ Difficulty ☐ Serving ☐ Estimated Time

Search By fields

Title =

+ Add Condition

Search with Conditions

Title: Kung Pao Chicken

Publish Date: 2024-06-20

Description: Savory and spicy Chinese dish with peanuts and vegetables.

Culture: Chinese

Difficulty: Intermediate

Serving: 5

estimated time: 75

View Recipe

AGGREGATION WITH HAVING

From userfilter.php

Line 29:

```
$checkStmt2 = $connection->prepare("SELECT u.age, COUNT(*)  
FROM userdetails u  
GROUP BY u.age  
HAVING MIN(u.age) >= :age2");
```

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Users Statistics

[Home](#)

Enter age amount:

[Search](#)

Find out how many people are in each age group where the average number of followers for users older than a specific age is group. (Find which age group is more popular based on the average number of followers across all age groups) :

Find the number of users and their age that are equal to or above the user-inputted age:

Find the average number of followers and number of following user of an age group:

Users Statistics

[Home](#)

[Search](#)

Find out how many people are in each age group where the average number of followers for users older than the inputted age group. (Find which age group is more popular based on the average number of followers across all age groups)

Age: 89, Number of People: 1
Age: 75, Number of People: 1

Find the number of users and their age that are equal to or above the user-inputted age:

Age: 87, Number of People: 1
Age: 71, Number of People: 1
Age: 98, Number of People: 1
Age: 125, Number of People: 1
Age: 56, Number of People: 1
Age: 89, Number of People: 1
Age: 102, Number of People: 1
Age: 75, Number of People: 1

```
cpssc304=# SELECT u.age, COUNT(*)
cpssc304-# FROM userdetails u
cpssc304-# GROUP BY u.age
cpssc304-# HAVING MIN(u.age) >= 50;
 age | count
-----+-----
  87 |      1
  71 |      1
  98 |      1
 125 |      1
  56 |      2
  89 |      1
 102 |      1
  75 |      1
  55 |      1
(9 rows)
```

NESTED AGGREGATION WITH GROUP BY

From userfilter.php

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Line 16:

```
$checkStmt = $connection->prepare("SELECT u.age, COUNT(*)
                                   FROM userdetails u
                                   WHERE u.age >= :age
                                   GROUP BY u.age
                                   HAVING AVG(numberoffollowers) >= (SELECT
AVG(numberoffollowers)
                                   FROM
userdetails u2)");
```

Users Statistics [Home](#)

Enter age amount:

Find out how many people are in each age group where the average number of followers for users older than a specific age is higher than the average number of followers for all users in every age group. (Find which age group is more popular based on the average number of followers across all age groups) :

Find the number of users and their age that are equal to or above the user-inputted age:

Find the average number of followers and number of following user of an age group:

Users Statistics [Home](#)

Enter age amount:

Find out how many people are in each age group where the average number of followers for users older than a specific age is higher than the average number of followers for all users in every age group. (Find which age group is more popular based on the average number of followers across all age groups) :

Age: 89, Number of People: 1
Age: 75, Number of People: 1

```
cpssc304=# SELECT u.age, COUNT(*)
cpssc304=#           FROM userdetails u
cpssc304=#           WHERE u.age >= 50
cpssc304=#           GROUP BY u.age
cpssc304=#           HAVING AVG(numberoffollowers) >= (SELECT AVG(numberoffollowers)
cpssc304=#           FROM userdetails u2);
```

age	count
87	1
89	1
102	1
75	1

(4 rows)

DIVISION:

