



National Technical University
School of Electrical and Computer Engineering

Class: Databases
User Manual of Semester Project

Group Number: 65

Students Info: Georgia Alexopoulou (03120164), Stylianos Bouliaris Malatestas (03119214)

Introduction to the Cooking Competition Management System

The app we have developed is designed to streamline the organization, storage and management of all essential information required for the smooth operation of a cooking competition. Whether you're an administrator, a cook, or a judge, this platform is built to enhance your experience and efficiency throughout the competition.

The key features of the app include include:

1. Recipe Management:

- Recipes are classified by type (cooking or pastry), national cuisine (e.g. Italian, Mexican), difficulty level (1 to 5) and meal type (e.g. breakfast, brunch, dinner).
- Each recipe includes a name, short description, tags (e.g. quick-lunch, cold dish) and useful tips (up to 3 per recipe).
- Detailed step-by-step instructions, required equipment with usage guidelines and time breakdown (preparation and cooking time).

- Specific ingredients with quantities, a base ingredient for classification (e.g. vegetarian, seafood) and dynamic nutritional information per serving.
2. Equipment and Ingredient Management:
 - List of necessary tools for each recipe with detailed instructions for use.
 - Ingredients grouped into food groups (e.g. dairy, vegetables) with detailed descriptions and nutritional data.
 3. Cooks and Judges Management:
 - Users' profiles include personal information, contact details, professional experience and specializations in national cuisines.
 - Designations such as 3rd cook, 2nd cook, 1st cook, assistant chef and chef.
 4. Competition Management:
 - The system automates the selection of 10 national cuisines, 10 cooks, 3 judges and 1 recipe per cuisine for each of the 10 annual episodes. Ensures fair rotation and compliance with participation rules.
 - Judges score each recipe execution on a scale of 1 to 5. The system determines the winner based on scores, professional qualifications and random selection in case of ties.
 5. User Roles and Permissions:
 - Administrators have full control over data, including creating backups and restoring the system.
 - Cooks have the ability to edit assigned recipes, add new recipes and update personal information.
 - All users and administrators can login, ensuring data integrity and privacy.
 6. Multimedia Support:
 - Each entity (recipes, ingredients, equipment etc.) is accompanied by images and detailed descriptions to provide a rich visual and informative experience.

Running the App - Prerequisites

In order to run the website, the user should execute the following steps:

1. Install NodeJS
2. Run file *DB Schema.sql* from folder *backend* and create the database
3. Import the csv files from folder *generate_data* into the directory *c:/xampp/mysql/data/mydb*

4. Run file *dummy_data.py* from folder *generate_data* and fill the database with data
5. Open the */db24-65/API* file in terminal
6. Set the encoded word for the login token, e.g.:

```
$env:MY_SECRET = "example word"  
(or if you're not using PowerShell, use command:)  
set MY_SECRET = example word
```

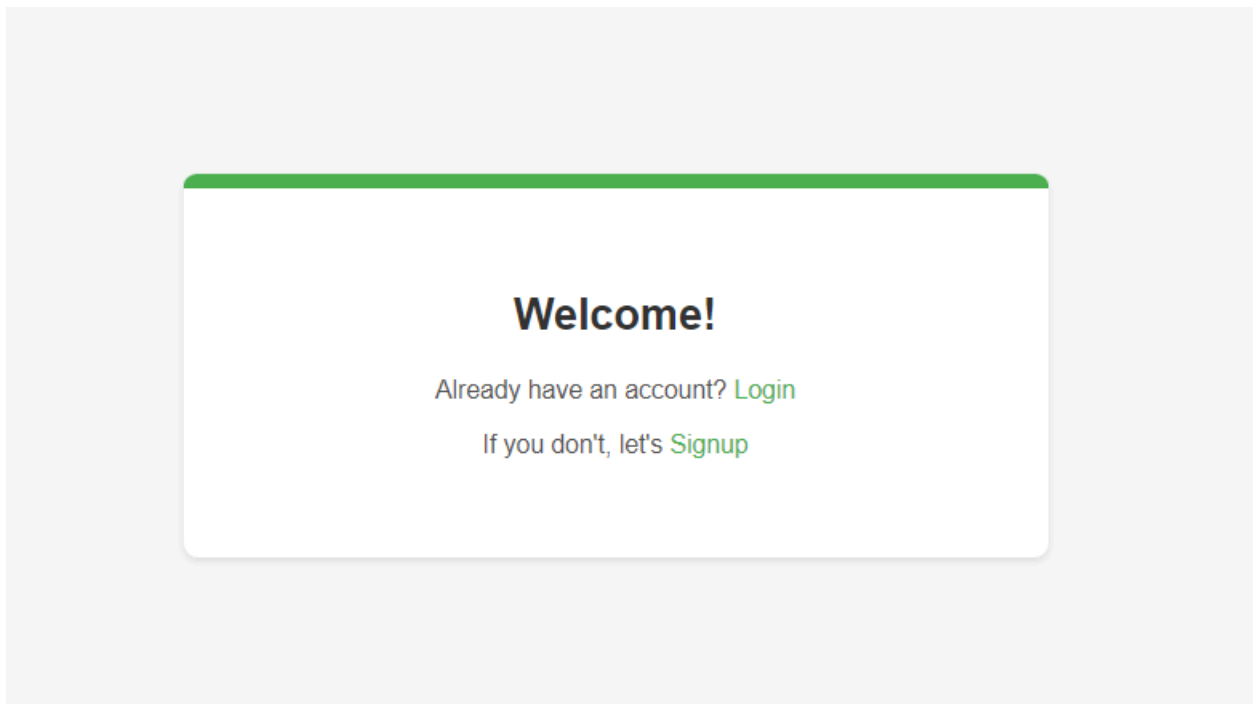
7. Run command:

```
node app.js
```

8. Go to link localhost:9876/dacontest/ and proceed with login

Layout of the Website

The starting page of our website has this layout:



Here the user can either choose to login (if he already has an account) or create a new account by clicking on [Signup](#)

Login:

If the user chooses to login, he is redirected to this page:

Login

Role:

Username:

Password:

Login

Not registered yet? [Sign Up](#)

When clicking on Role, a dropdown list appears allowing the person logging in to choose his role on the website:

Role:

Admin

User

After choosing a role, the user just has to enter his valid credentials, and click the login button:

Note: User that are not registered as administrators will not be able to login as administrators just by choosing Admin instead of User

Signup:

If the user chooses to sign up, he is redirected to this page:

Sign Up

First Name:

Last Name:

Phone Number:

Birth Date:

Years Of Experience:

Position:

Username:

Password:

Confirm Password:

Sign Up

Here, the user may input his credentials. Since all the users of this website will be cooks participating in the cooking contest, each user must also fill in the years of experience field and also choose the most senior position he has experience on.

The diagram illustrates the user's selection process for the 'Position' field. A green arrow points from the 'Position' input field in the form to a dropdown menu. A second green arrow points from the dropdown menu to an expanded list of positions.

Position:

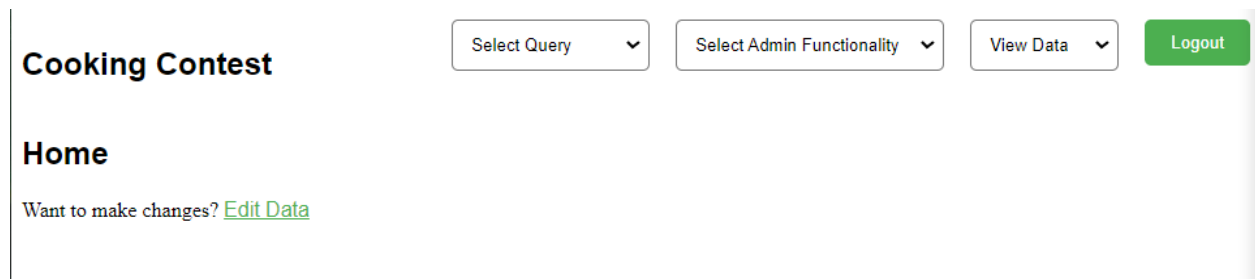
- 15
- 01
- 02
- 03
- 04
- 05
- 06
- 07
- 08
- 09
- 10
- 11
- 12
- 13
- 14
- 15**
- 16
- 17
- 18
- 19
- 20

Position:

- First Cook
- First Cook**
- Second Cook
- Third Cook
- Sous-Chef
- Chef

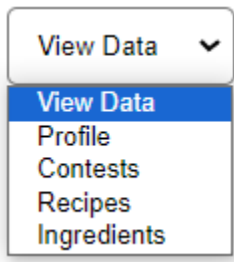
Already have an account? [Log In](#)

After the user logs in to the website he is met with this page:



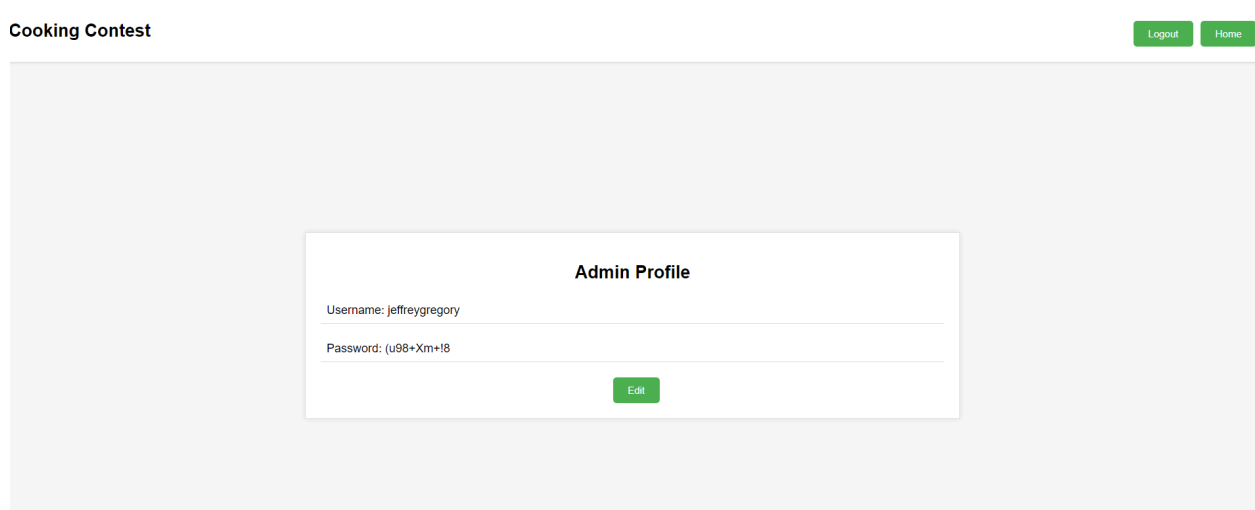
Here the user can choose and perform all of the websites function (depending on permissions)

Using the View Data dropdown list, user can choose to see:



1. His personal profile data
2. All previous contest data
3. All recipes
4. All ingredients

Case: Admin Profile



When an admin clicks on Profile, he gets redirected to this page where an admin can see and change username and password.

Case: User Profile

Cooking Contest

Logout

Home

User Profile

First Name: Thomas

Last Name: Guerrero

Username: kstewart

Phone Number: (904)575-7067

Birthday: Jun 13, 1981

Age: 42

Years of Experience: 9

Position: second cook

Edit

Activate Windows
Go to Settings to activate Windows.

When a user clicks on Profile, he gets redirected to this page where a user can see and change their personal information

User Profile

First Name:

Thomas

Last Name:

Guerrero

Phone Number:

(904)575-7067

Birthday:

06/11/1981

Years of Experience:

9

Position:

First Cook

Username:

kstewart

Password:



Submit

Here, the user information already registered in the DB are shown and the user can modify each field accordingly.

When editing the position field, a dropdown list appears, similar to the one we saw earlier on the signup page, to avoid a mismatch of data in the DB

In the Admin case, a similar page shows up with editable fields for only the admin data.

Recipes:

When clicking on recipes the user is redirected to this page displaying all the recipes registered in the competition

Cooking Contest

[Logout](#)[Home](#)[Edit Recipes](#)

Recipes

Want to [add a Recipe](#) ?

Recipe Name	Recipe Type	Cuisine	Primary Ingredient	Brief Description	Level of Difficulty	No. of Portions
Jamaican Jerk Chicken	cooking	Caribbean	Adobo Chile	Traditional Jamaican dish featuring marinated chicken grilled to perfection with a spicy and aromatic jerk seasoning.	3	6
Pasta Salad	cooking	Mediterranean	Tuna	Refreshing salad made with cooked pasta, fresh vegetables, and a tangy vinaigrette dressing, perfect for picnics or potlucks.	2	8
Lasagna	cooking	Italian	Breadcrumbs	Classic Italian dish made with layers of lasagna noodles, rich tomato sauce, creamy béchamel, and savory cheese, baked to golden perfection.	2	4
Hearty Pancakes	cooking	Swiss	same	Fluffy pancakes made with hearty ingredients like oats, whole wheat flour, and buttermilk, perfect for a satisfying breakfast.	3	2
Summer Garden Couscous Salad	cooking	Thai	practice	Light and vibrant salad made with fluffy couscous, fresh garden vegetables, and a zesty lemon dressing, ideal for summer gatherings.	4	8
Squash Corn Chowder	cooking	Moroccan	Soy Sauce	Creamy and comforting chowder soup made with tender squash, sweet corn kernels, and aromatic herbs, a hearty meal for chilly evenings.	4	2
White beans, tomatoes, and spinach	cooking	Indian	Buckwheat	Healthy and flavorful dish made with tender white beans, juicy tomatoes, and nutritious spinach, seasoned with garlic and herbs.	2	7

From this page the user can view all the recipes. The user has two additional options from this page: Adding a new recipe that he knows, and Editing one of his recipes. When clicking on add a Recipe the user is redirected to this page:

Cooking Contest

[Logout](#)[Home](#)

Add Your Recipe

Recipe Name	<input type="text"/>
Recipe Type	<input type="text" value="Cooking"/>
Cuisine	<input type="text"/>
Level of Difficulty (rate out of 5)	<input type="text"/>
Recipe Description	<input type="text"/>
No. of Portions	<input type="text"/>
Primary Ingredient	<input type="text"/>
Recipe Image	<input type="text"/>

[Submit](#)

Activate Windows
Go to Settings to activate Windows.

Here the user can specify all these fields to define a new recipe and add it to the DB.

By clicking on Edit Recipes, the user is redirected to this page where all the recipes he knows are displayed, and he can make adjustments to all the fields of the recipe.

Cooking Contest

[Logout](#)[Home](#)

Edit Your Recipes

Want to [add a Recipe](#)?

Recipe Name	Recipe Type	Cuisine	Primary Ingredient	Brief Description	Level of Difficulty	No. of Portions	Edit
Glazed Pork Chops with Corn Bread Dressing	cooking	Tunisian	serious	Juicy pork chops coated in a sweet and tangy glaze, served with fluffy cornbread dressing and steamed vegetables, a delicious and comforting meal.	3	5	Save
Cloverleaf Rolls	cooking	Peruvian	Tomatoes	Soft and fluffy dinner rolls shaped into charming cloverleaves, perfect for serving with butter or as a side to soups and salads.	2	2	Save
Home fries	cooking	Spanish	involve	Crispy and golden brown potatoes sautéed with onions and seasoned with herbs and spices, a classic breakfast side dish that pairs perfectly with eggs and bacon.	1	7	Save
Brioche Chocolate Rolls	pastry making	Polish	Milk	Soft and fluffy brioche rolls filled with rich chocolate, perfect for serving as a sweet breakfast treat or indulgent dessert.	2	7	Save
Prosciutto apple flatbread pizza	cooking	Chinese	Spinach	Delicious flatbread pizza topped with thinly sliced prosciutto, sweet apple slices, tangy goat cheese, and a drizzle of balsamic glaze for a delightful flavor combination.	2	3	Save

Here all the fields are editable once clicked on and the user can adjust as needed.

Ingredients:

When the user clicks on ingredients he is redirected to this page where he can see all ingredients listed in the DB.

Note: Some ingredient names are just dummy string data to test for DB functionality

Cooking Contest

[Logout](#)[Home](#)

Ingredients

Ingredient Name	Grams of Fat per Portion	Grams of Protein per Portion	Grams of Carbs per Portion	Calories per Portion
Chicken	9	10	20	6
wall	15	10	17	3
boy	18	8	19	9
serious	14	9	7	9
federal	17	7	17	3
relationship	12	3	10	8
case	10	2	11	5
save	17	10	5	7
address	14	13	16	10
toward	13	5	17	3
practice	3	1	11	2
same	3	4	13	4

Contests:

When clicking on contests, user is redirected to this page, containing data for all contest rounds and years as well as which cooks participated in each round as well as which cooks judged in each round.

Cooking Contest

[Logout](#)[Home](#)

Contests

Search by Year: [Search](#)Search by Cook Name: [Search](#)

Round Year	Round Number	Cooks' Names	Judges' Names
2010	1	Abigail Conner, Adriana Stephenson, Carlos Campbell, Courtney Thomas, Danielle Williams, Joann Watkins, Justin Schroeder, Lauren Williams, Michael Hughes, Rachel Sawyer	Donald Castro, Eric Gibson, Matthew Smith
2010	2	Ashley Harding, Christian Sherman, Eric Gibson, Hannah Young, John Tran, Kimberly Lyons, Leah Zavala, Paula Clarke, Samantha Coleman, Susan Meza	Bradley Peterson, Carlos Campbell, Ernest Young
2010	3	Catherine Smith, Chelsey Bishop, Christine Freeman, Daniel Stephens, Jeffrey Gutierrez, John Simon, Kevin Douglas, Lauren Colon, Nicholas Le, Samuel Washington	Bradley Peterson, Ernest Young, Joel Melton
2010	4	Bradley Peterson, Edward Miller, Elizabeth Peterson, Matthew Grant, Michael Garcia, Rachel Wells, Shane Ashley, Thomas Boyle, Timothy Beard, Timothy Cochran	Eric Gibson, Ernest Young, Gregory Alvarez
2010	5	Adriana Stephenson, Brian Li, Katie Oliver, Kimberly French, Madison Dennis, Nichole Dunn, Sarah Nichols, Tonya Little, Troy Khan, Valerie Bryant	Bradley Peterson, Carlos Campbell, Joel Melton
2010	6	Courtney Thomas, Jennifer Berry, Jennifer Mcneil, Juan Todd, Kimberly Stephenson, Melissa Villa, Michael Johnson, Richard Henson, Robert Howard, Taylor Hunt	Bradley Peterson, Carlos Campbell, Ernest Young

Using the search functionality, user can filter displayed data as he wishes, for example:

Cooking Contest

[Logout](#)[Home](#)

Contests

Search by Year: [Search](#)Search by Cook Name: [Search](#)

Round Year	Round Number	Cooks' Names	Judges' Names
2010	1	Abigail Conner	Donald Castro, Eric Gibson, Matthew Smith
2010	7	Abigail Mayer	Carlos Campbell, Ernest Young, John Hughes
2010	8	Abigail Conner	Eric Gibson, Ernest Young, Gregory Alvarez
2011	4	Abigail Mayer	Carlos Campbell, Donald Castro, Joel Melton
2011	7	Abigail Conner	Amanda Hall, Carlos Campbell, Ernest Young
2011	8	Abigail Mayer	Carlos Campbell, Eric Gibson, Gregory Alvarez
2012	1	Abigail Conner	Bradley Peterson, Eric Gibson, Joel Melton
2012	3	Abigail Mayer	Eric Gibson, Ernest Young, John Hughes
2013	9	Abigail Conner	Carlos Campbell, Donald Castro, Joel Melton
2013	10	Abigail Mayer	Bradley Peterson, Carlos Campbell, Eric Gibson
2014	3	Abigail Conner	Eric Gibson, Ernest Young, Joel Melton

Activate Windows
Go to Settings to activate Windows.

Contests

Search by Year: Search by Cook Name:

Round Year	Round Number	Cooks' Names	Judges' Names
2015	1	Abigail Conner, Abigail Mayer, Christopher Nguyen, David Cruz, Heather Cruz, John Huerta, Kayla Huber, Maria Mills, Patricia Mullins, Russell Anderson	Eric Gibson, Ernest Young, Gregory Alvarez
2015	2	Billy Hall, Christopher Frank, John Neal, John Simon, Kayla Huber, Louis Hayden, Rachael Gross, Richard Henson, Susan Meza, Tracy White	Ann Mahoney, Carlos Campbell, Ernest Young
2015	3	Anna Stokes, Chelsey Bishop, Jeffrey Gutierrez, Johnny Hansen, Mary Foster, Michael Garcia, Patricia Goodman, Rebekah Ward, Ryan Rose, Travis Kaiser	Bradley Peterson, Ernest Young, Matthew Smith
2015	4	Brandy Lewis, Cynthia Goodwin, Daniel Stephens, Danielle Williams, Jennifer Berry, John Dawson, Kevin Brown, Maria Camacho, Mark McIntosh, Timothy Cochran	Carlos Campbell, Ernest Young, Matthew Smith
2015	5	Abigail Conner, Cathy Ford, Hannah Young, Holly Jones, Jennifer Garcia, Jenny Wells, Larry Smith, Leah Zavala, Sarah Nichols, Thomas Boyle	Carlos Campbell, Ernest Young, Matthew Smith
2015	6	Ashley Harding, Casey Parks, David Steele, John Frost, Lynn Cortez, Mathew Murphy, Maureen Sanders, Michael Johnson, Nichole Brown, Paul Sutton	Bradley Peterson, Carlos Campbell, Ernest Young
2015	7	Andrew Rogers, Catherine Smith, Christian Sherman, Derek Petty, Desiree White, Joann Watkins, Mary Foster, Nicole White, Richard Henson, Tiffany Harrison	Amanda Hall, Ernest Young, Matthew Smith
2015	8	Abigail Mayer, Christine Davis, Cynthia Hernandez, Donald Castro, Jeremy Reid, Juan Todd, Nicholas McDonald, Nichole Dunn, Patricia Mullins, Tiffany Alvarez	Bradley Peterson, Carlos Campbell, Joel Melton
2015	9	Christopher Frank, David Alvarez, Dustin Smith, Jennifer Berry, Juan White, Kimberly French, Leah Zavala, Lisa Jones, Michael Garcia, Stacy Blair	Ann Mahoney, Eric Gibson, Ernest Young
2015	10	Antonio Davis, Jennifer Mckay, John Huerta, Maria Mills, Mary Lewis, Maureen Sanders, Paul Sutton, Rebekah Ward, Sara Thomas, Thomas Boyle	Carlos Campbell, Eric Gibson, Ernest Young

Activate Windows
Go to Settings to activate Windows.

Queries:

Finally, the user can access all the queries we made as part of the exercise, by clicking on the Select Query dropdown list found on the home page:

Select Query ▼

Select Query

3.1

3.2

3.3

3.4, 3.5, 3.7, 3.14

3.6, 3.9, 3.12

3.8

3.10, 3.15

3.11

For example, if a user selects the query requests in question 3.1, he is redirected to a page containing the average cook ratings and the average cuisine rating.

Cook Mean Ratings

Cook ID	First Name	Last Name	Username	Mean Rating
1	Thomas	Guerrero	kstewart	3.0000
2	Charles	Williams	alexandria64	3.5000
3	Wesley	Frye	smonroe	2.5000
4	Jeffery	Espinoza	bfisher	3.2000
5	Daniel	Williamson	fkeith	4.0000
6	Christie	Gilbert	johnsoncynthia	3.7500
7	Andrew	Martinez	annaadams	3.3333
8	Christian	Taylor	eric57	2.7143
9	April	Horn	martinezsavannah	5.0000
10	Connie	Hendrix	harrisdeborah	2.3333

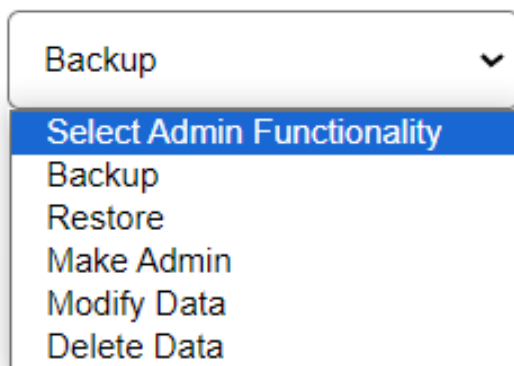
Cuisine Mean Ratings

Cuisine Name	Mean Rating
African	3.5455
Algerian	2.5455

Admin Functionalities:

The admin has access to all the user functionalities shown above but also to a few more mainly concerning the maintenance and usage functionality of the site.

From the home page dropdown list, we can see all the additional functionalities the admin has:



1. Backup: The admin can make a copy of the DB by writing all DB data to CSV files
2. Restore: The admin restores the DB to the latest backup
3. Make Admin: The admin can promote a user and grant him administrator privileges
4. Modify Data: Here the admin can modify all the data in the DB
5. Delete Data: The admin can delete data existing on the DB

Make Admin:

The admin gets redirected to this page, where by entering the username of a user, that user is promoted to admin and granted admin privileges

Cooking Contest

[Logout](#) [Backup](#) [Restore](#) [Profile](#) [Make Admin](#)

Which user do you want to turn into administrator?

Username:

[Make Admin](#)

Modify Data:

The admin gets redirected to this page and by clicking on this dropdown list, he can choose the table he wants to modify:

Cooking Contest

Table: -- Please select a table -- ▾

[Submit](#)



-- Please select a table -- ▾

-- Please select a table -- ▲

- User
- Cook-Recipe
- Cook-Cuisine
- Judges-Round
- Participants-Round
- Cuisine
- Cuisines-Round
- Dietary Info
- Equipment
- Food Group
- Ingredients
- Ingredients-Food Group
- Ratings
- Recipe
- Recipe-Subject
- Recipe-Meal Type
- Recipe-Dietary Info
- Recipe-Steps
- Recipe-Tags

Upon selecting a table, the table is displayed on the page and the admin can modify its content just by clicking on the specific cell the admin wishes to modify:

cook_id	first_name	last_name	phone_number	birth_date	age	years_of_experience	position	cook_img	username	password
1	Thomas	Guerrero	(904)575-7067	1981-06-11	42	9	second cook	https://placekitten.com/780/145	kstewart	!YLIIKxm2f
2	Charles	Williams	(614)855-7984	1972-05-02	52	9	second cook	https://placekitten.com/8/806	alexandria64	L)1w7^BacU
3	Wesley	Frye	594-927-7981x286	1965-05-31	58	5	sous-chef	https://dummyimage.com/7x275	smonroe	_4ODsr1Hbg
4	Jeffery	Espinoza	(536)654-7381x20731	1995-11-13	28	4	sous-chef	https://placekitten.com/364/377	bfisher	o(5EFhpYGL
5	Daniel	Williamson	463-334-7023	1984-07-25	39	10	sous-chef	https://picsum.photos/733/801	fkeith	&2SG7b\$2#6

cook_id	first_name	last_name	phone_number	birth_date	age	years_of_experience	position	cook_img	username	password
1	<input type="text" value="Thomas"/>	Guerrero	(904)575-7067	1981-06-11	42	9	second cook	https://placekitten.com/780/145	kstewart	!YLIIKxm2f

cook_id	first_name	last_name	phone_number	birth_date	age	years_of_experience	position	cook_img	username	password
1	Stelios	Guerrero	(904)575-7067	1981-06-11	42	9	second cook	https://placekitten.com/780/145	kstewart	!YLIIKxm2f

Delete Data:

When an admin selects delete data, he is redirected to the same page as modify data, however, now a delete button is present on the right side of the table and by clicking it, the admin can delete data from the DB.

cook_id	first_name	last_name	phone_number	birth_date	age	years_of_experience	position	cook_img	username	password	Actions
1	Stelios	Guerrero	(904)575-7067	1981-06-11	42	9	second cook	https://placekitten.com/780/145	kstewart	!YLIIKxm2f	<button>Delete</button>
2	Charles	Williams	(614)855-7984	1972-05-02	52	9	second cook	https://placekitten.com/8/806	alexandria64	L)1w7^BacU	<button>Delete</button>
3	Wesley	Frye	594-927-7981x286	1965-05-31	58	5	sous-chef	https://dummyimage.com/7x275	smonroe	_4ODsr1Hbg	<button>Delete</button>
4	Jeffery	Espinoza	(536)654-7381x20731	1995-11-13	28	4	sous-chef	https://placekitten.com/364/377	bfisher	o(5EFhpYGL	<button>Delete</button>
5	Daniel	Williamson	463-334-7023	1984-07-25	39	10	sous-chef	https://picsum.photos/733/801	fkeith	&2SG7b\$2#6	<button>Delete</button>

After deleting the first cook, the page looks like this:

cook_id	first_name	last_name	phone_number	birth_date	age	years_of_experience	position	cook_img	username	password	Actions
2	Charles	Williams	(614)855-7984	1972-05-02	52	9	second cook	https://placekitten.com/8/806	alexandria64	L)1w7^BacU	<button>Delete</button>
3	Wesley	Frye	594-927-7981x286	1965-05-31	58	5	sous-chef	https://dummyimage.com/7x275	smonroe	_4ODsr1Hbg	<button>Delete</button>
4	Jeffery	Espinoza	(536)654-7381x20731	1995-11-13	28	4	sous-chef	https://placekitten.com/364/377	bfisher	o(5EFhpYGL	<button>Delete</button>
5	Daniel	Williamson	463-334-7023	1984-07-25	39	10	sous-chef	https://picsum.photos/733/801	fkeith	&2SG7b\$2#6	<button>Delete</button>

Backup - Restore:

The Backup and Restore functionalities do not have a front-end, however, they are executed as soon as the admin clicks on the button.