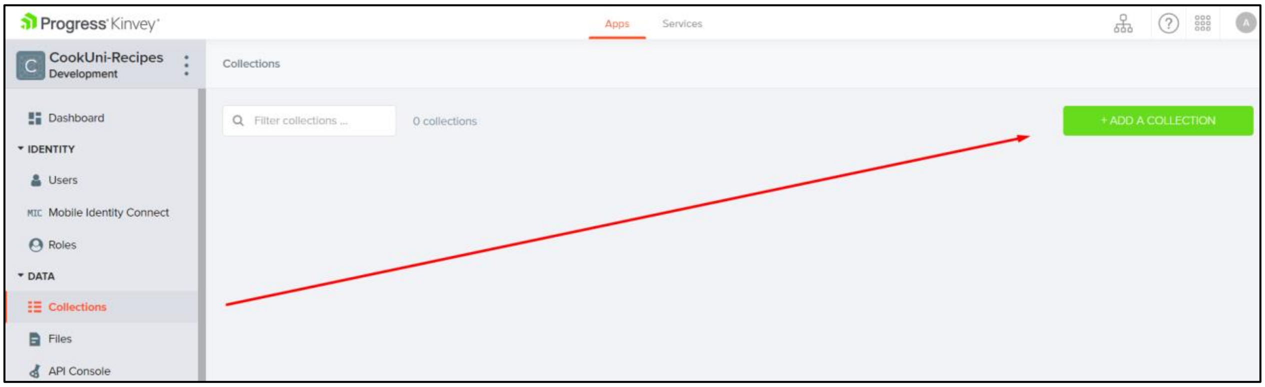
JS Apps Exam - CookUni Single Page Application

Using libraries like **jQuery**, **Handlebars** and **Sammy** is allowed but not obligatory. You are assigned to implement a **Web application** (SPA) using HTML5, JavaScript, AJAX, and JSON with cloud-based backend (**Kinvey**). The application should store **users** and **recipes**. **Users** should be able to **register**, **login**, **logout** and **view all recipes**. They should also be able to **create**, **view**, **like** and **archive recipes,** depending on their **authentication**.

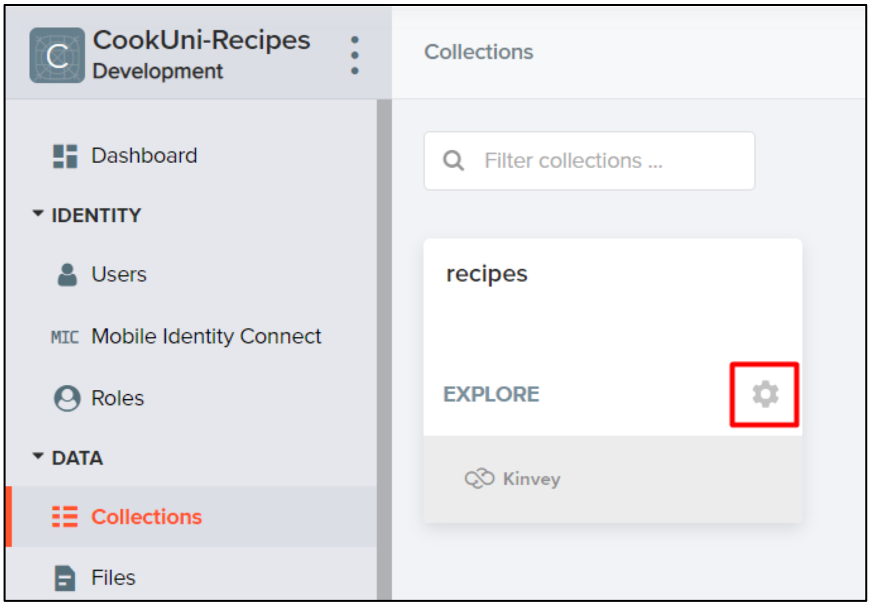
1. Create a Kinvey REST Services

Register at **Kinvey.com** and create an application to keep your data in the cloud.

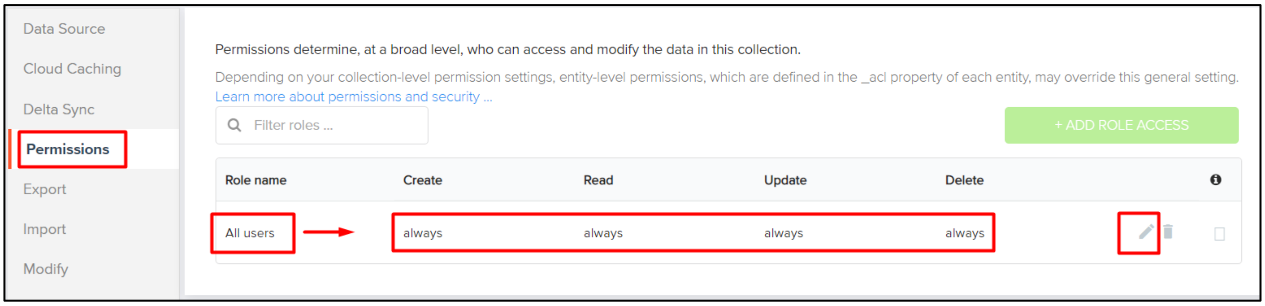
Create a collection called **recipes.** Each **recipe** has a **meal**, **ingredients**, **prepMethod**, **description, foodImageURL, category, categoryImageURL** and **likesCounter** (starting from 0).



In order to be able to keep track of the likes of each recipe, you need to give all users permission **to edit this collection**. So, go to the **properties** of the collection.



Then go to the **permissions** section and **edit** them to look like this:



Permissions determine, at a broad level, who can access and modify the data in this collection.

Depending on your collection-level permission settings, entity-level permissions, which are defined in the _acl property of each entity, may override this general setting. Learn more about permissions and security ...

Role name	Create	Read	Update	Delete
All users	always	always	always	always

2. Test the Kinvey REST Services

Using **Postman** or other HTTP client tool (you can use Kinvey's built-in **API Console**), test the REST service end points:

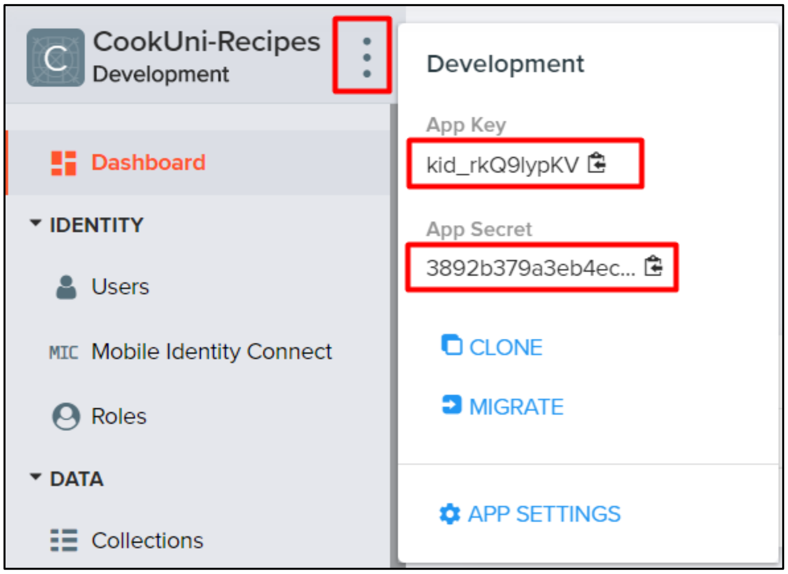
User Registration (Sign Up)

Every user should have **username**, **password**, **firstName** and **lastName**

<table>
<tr><td colspan="2"><b>POST</b> https://baas.kinvey.com/user/<b><i>app_id</i></b>/</td></tr>
<tr><td>Request headers</td><td><pre>Authorization: Basic base64(app_id:app_secret)
Content-Type: application/json</pre></td></tr>
<tr><td>Request body</td><td><pre>{
  "username": "testuser",
  "password": "testuserpass890",
  "firstName": "Peter",
  "lastName": "Peshov"
}</pre></td></tr>
<tr><td>Response
201 Created</td><td><pre>{
    "_id": "59930c78a743e20c7d3fca77",
    "username": "testuser",
    "password": "testuserpass890",
    "firstName": "Peter",
    "lastName": "Peshov"
}</pre></td></tr>
</table>

Error response 409 Conflict	`{ "error": "UserAlreadyExists", "description": "This username is already taken. Please retry your request with a different username",  "debug": "" }`
Error response 401 Unauthorized	`{ "error": "InvalidCredentials", "description": "Invalid credentials. Please retry your request with correct credentials", "debug": "" }`

The request needs "**Basic**" **authentication.** Use the Kinvey **App Key** and **App Secret** as credentials.


CookUni-Recipes
Development

Development

App Key
kid_rkQ9lypKV

App Secret
3892b379a3eb4ec...

User Login (Sign In)

POST https://baas.kinvey.com/user/***app_id***/login	

Request headers	`Authorization: Basic base64(app_id:app_secret)`
	`Content-Type: application/json`

Request body	`{ "username": "testuser", "password": "testuserpass890" }`
Response 200 OK	`{ "_id": "59930c78a743e20c7d3fca77", "username": "testuser" "_kmd": {`

	"authtoken":"8e6471bc-3712-4cfb-b92e-50e62a0c80….Duj5fHdM /7XHIe6KdY=" … }, … }
Error response 401 Unauthorized	{ "error": "InvalidCredentials", "description": "Invalid credentials. Please retry your request with correct credentials", "debug": "" }

Successful login returns an "**authtoken**" which is later used to authenticate the CRUD operations.

User Logout

POST https://baas.kinvey.com/user/***app_id***/ logout	
Request headers	Authorization: Kinvey **authtoken**
Response 204 No Content	
Error response 401 Unauthorized	{ "error": "InvalidCredentials", "description": "Invalid credentials. Please retry your request with correct credentials", "debug": "" }

List All Recipes

GET https://baas.kinvey.com/appdata/app_id/recipes	
Request headers	Authorization: Kinvey **authtoken**
Response 200 OK	[{ "meal":"Spaghetti", "ingredients":"['Spaghetti', 'Saltl', ...]", "prepMethod":"Open the spaghetti and ...", "description":"It's super delicious recipe..", "category":"Grain Food", "foodImageURL": "https://...", "categoryImageURL": "https://...",

	"likesCounter": "0"
	"_acl":
	{
	"creator":"5bfd4674682ae23931b4f91c"
	},
	"_kmd":
	{
	"lmt":"2018-11-28T15:25:24.521Z",
	"ect":"2018-11-28T14:55:00.958Z"
	}
	}, …]

Error response 401 Unauthorized	{ "error": "InvalidCredentials", "description": "Invalid credentials. Please retry your request with correct credentials", "debug": "" }

Create Recipe

POST https://baas.kinvey.com/appdata/***app_id***/recipes	
Request headers	Authorization: Kinvey **authtoken** Content-Type: application/json

Request body	{
	"meal":"Spaghetti",
	"ingredients":"['Spaghetti', 'Salt', ...]",
	"prepMethod":"Open the spaghetti and ...",
	"description":"It's super delicious recipe..",
	"category":"Grain Food",
	"foodImageURL": "https://...",
	"categoryImageURL": "https://...",
	"likesCounter": "0"
	}

Response	

201 Created	{
	"meal":"Spaghetti",
	"ingredients":"['Spaghetti', 'Salt', ...]",
	"prepMethod":"Open the spaghetti and ...",
	"description":"It's super delicious recipe..",
	"category":"Grain Food",
	"foodImageURL": "https://...",
	"categoryImageURL": "https://...",
	"likesCounter": "0",
	"_acl": {
	"creator": "5bfd4674682ae23931b4f91c"
	},
	"_kmd": {
	"lmt": "2018-11-28T15:39:58.801Z",
	"ect": "2018-11-28T15:39:58.801Z"
	},
	"_id": "5bfeb6ce682ae23931bf7d26"
	}

Error response 401 Unauthorized	{ "error": "InvalidCredentials", "description": "Invalid credentials. Please retry your request with correct credentials", "debug": "" }

Delete Recipe

DELETE https://baas.kinvey.com/appdata/***app_id***/recipes/***recipe_id***	
Request headers	Authorization: Kinvey **authtoken**

Response
200 OK
	{
	"count": 1
	}

Error response 404 Not Found	{ "error": "EntityNotFound", "description": "This entity not found in the collection", "debug": "" }

Error response 401 Unauthorized	`{ "error": "InvalidCredentials", "description": "Invalid credentials. Please retry your request with correct credentials", "debug": "" }`

Edit Recipe

PUT [https://baas.kinvey.com/appdata/***app_id***/recipes/***recipe_id***](https://baas.kinvey.com/appdata/app_id/recipes/recipe_id)	
Request headers	Authorization: Kinvey **authtoken** Content-Type: application/json

Request body	`{`
	`"meal":"Spaghetti",`
	`"ingredients":"['Spaghetti', 'Salt', ...]",`
	`"prepMethod":"Open the spaghetti and ...",`
	`"description":"It's super delicious recipe..",`
	`"category":"Grain Food",`
	`"foodImageURL": "https://...",`
	`"categoryImageURL": "https://...",`
	`"likesCounter": "5",`
	`}`

Response
200 Ok
	`{`
	`"_id": "59931398996ab5127d2a84d1",`
	`"meal":"Spaghetti",`
	`"ingredients":"['Spaghetti', 'Salt', ...]",`
	`"prepMethod":"Open the spaghetti and ...",`
	`"description":"It's super delicious recipe..",`
	`"category":"Grain Food",`
	`"foodImageURL": "https://...",`
	`"categoryImageURL": "https://...",`
	`"likesCounter": "5",`
	`}`

Error response 401 Unauthorized	`{ "error": "InvalidCredentials", "description": "Invalid credentials. Please retry your request with correct credentials", "debug": "" }`

Like Recipe

PUT [https://baas.kinvey.com/appdata/***app_id***/recipes/***recipe_id***](https://baas.kinvey.com/appdata/app_id/recipes/recipe_id)	
Request headers	Authorization: Kinvey **authtoken** Content-Type: application/json

Request body	`{`
	`    "meal":"Spaghetti",`
	`    "ingredients":"['Spaghetti', 'Salt', ...]",`
	`    "prepMethod":"Open the spaghetti and ...",`
	`    "description":"It's super delicious recipe..",`
	`    "category":"Grain Food",`
	`    "foodImageURL": "https://...",`
	`    "categoryImageURL": "https://...",`
	`    "likesCounter": "5",`
	`}`

Response
200 Ok
	`{`
	`    "_id": "59931398996ab5127d2a84d1",`
	`    "meal":"Spaghetti",`
	`    "ingredients":"['Spaghetti', 'Salt', ...]",`
	`    "prepMethod":"Open the spaghetti and ...",`
	`    "description":"It's super delicious recipe..",`
	`    "category":"Grain Food",`
	`    "foodImageURL": "https://...",`
	`    "categoryImageURL": "https://...",`
	`    "likesCounter": "5",`
	`}`

Error response 401 Unauthorized	`{ "error": "InvalidCredentials", "description": "Invalid credentials. Please retry your request with correct credentials", "debug": "" }`

3. CookUni - HTML and CSS

You are given the Web design of the application as **HTML** + **CSS** files.

- Initially all views and forms are shown in the HTML. You can **hide** them by using CSS (**`display:none`**), **delete** from the DOM all unnecessary elements or just display the views that need to be displayed.
- You may render the views / forms / components with **jQuery** or **Handlebars**.

Important: Don't change the elements' **class name** and **id**. Don't rename form fields / link names / ids. You can add **data attributes** to any elements, modify **href attributes** of links and add **action/method attributes** to forms (to allow the usage of a routing library).

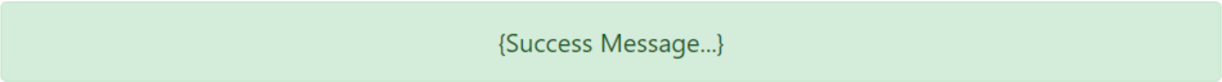
4. CookUni - Client-Side Web Application

Design and **implement** a client-side front-end app (SPA) for managing **recipes**. Implement the functionality described below.

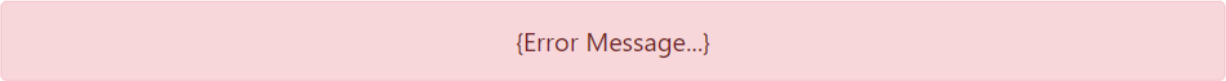
Notifications - 5 Points

The application should notify the users about the result of their actions.

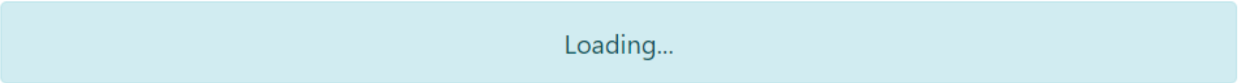
- In case of a **successful** action, a **notification message (green)** should be shown. It should disappear automatically after 5 seconds or manually when the user clicks it.


{Success Message...}

- In case of **error**, an **error notification message (red)** should be shown. It should disappear on user click.


{Error Message...}

- During the **AJAX calls** a **loading notification message (blue)** should be shown. It should disappear automatically **as soon as** the AJAX call is completed.

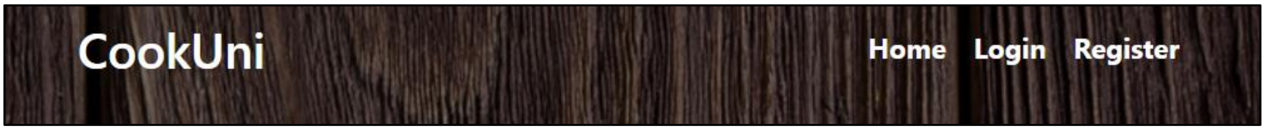

Loading...

- <u>NOTE</u>: You get all the points if **all** the notifications have the **exact content** as described in each section above.

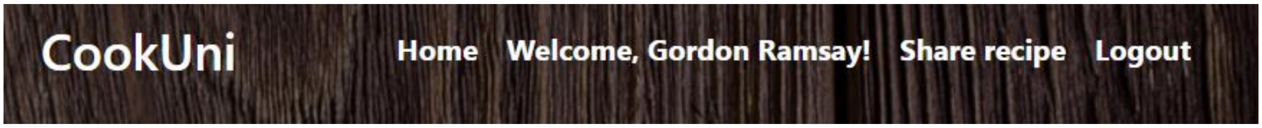
Navigation Bar (Header) - 5 Points

Implement a **header** for the app: navigation links should correctly change the current screen (view).

- Clicking on the links in the **header** should display the corresponding views for the links (views are sections in the HTML code).
- You can **hide** them with CSS (**`display:none`**), **delete** from the DOM all unnecessary elements or just display the views that need to be displayed.
- The given "**`CookUni`**", "**`Home`**", "**`Login`**" and "**`Register`**" should be visible only for **anonymous** users.

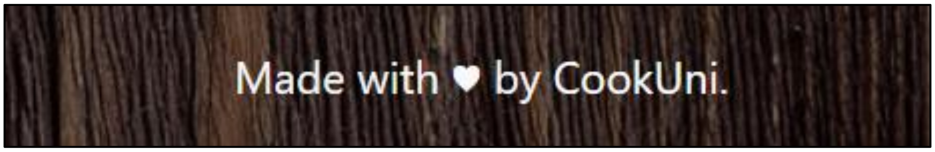


- **Logged in users** should see "**`CookUni", "Home", "Welcome, {firstName lastName}!`**", "**`Share recipe`**", and "**`Logout`**"



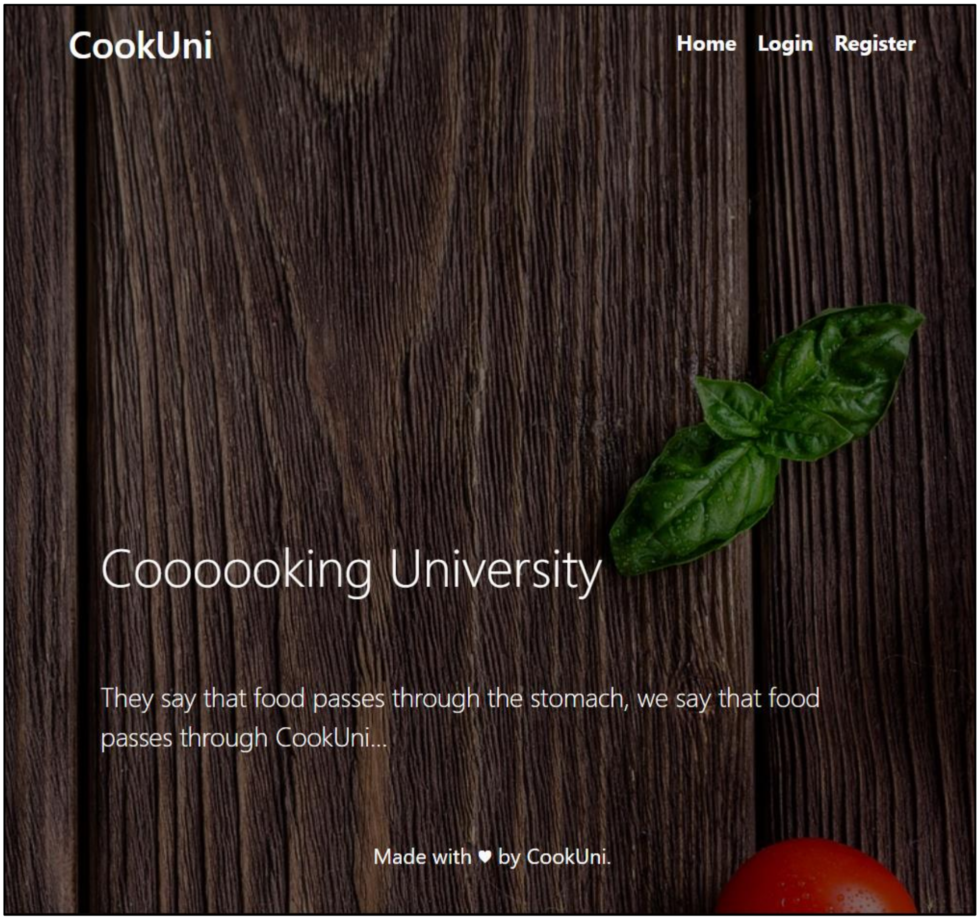
Footer

<u>The **footer** for all pages is the **same** and **every** view should **have it**!</u>


Made with ♥ by CookUni.

Home Page (Anonymous) - 5 Points

The initial screen should display the **Anonymous header** ("**`Home`**", "**`Login`**" and "**`Register`**") + **Anonymous Home page** + **Footer**



Cooooking University

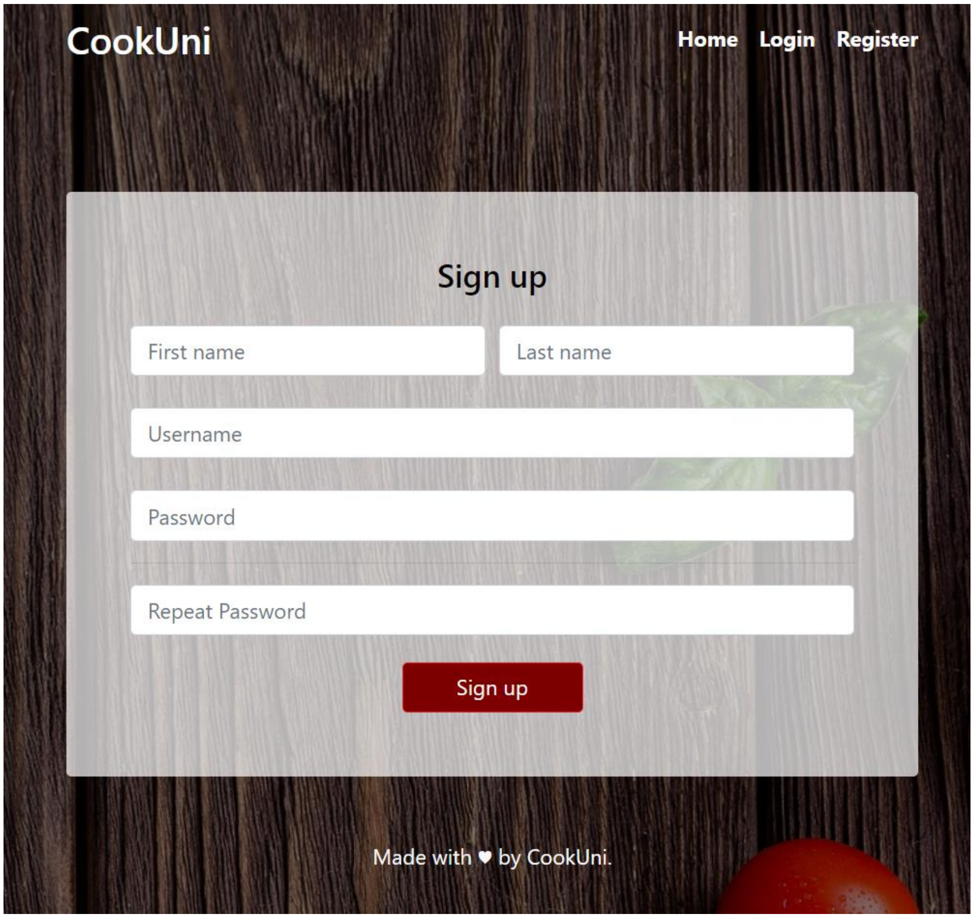
They say that food passes through the stomach, we say that food passes through CookUni...

Made with ♥ by CookUni.

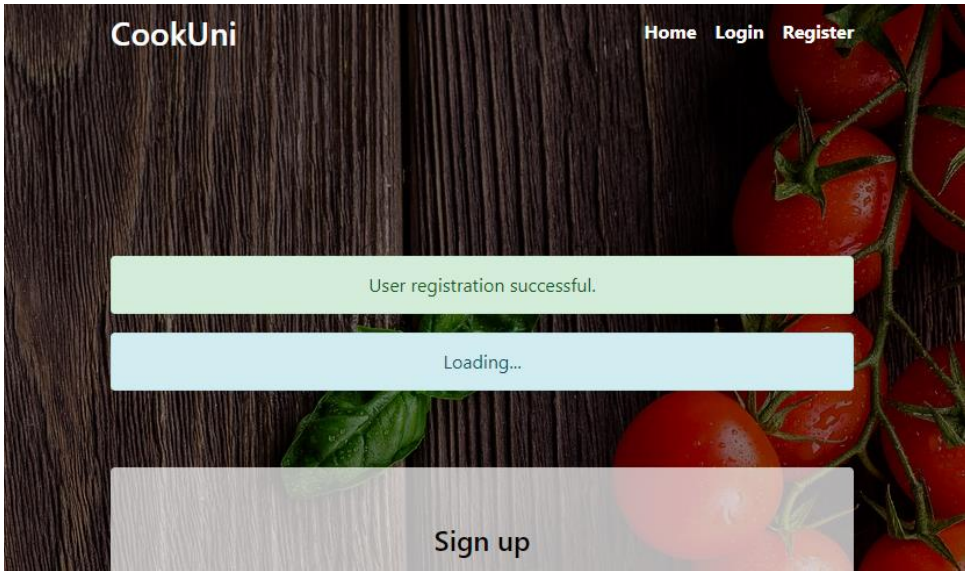
Register Page (Sign Up) - 5 Points

By given **First name**, **Last name**, **Username** and **Password,** the app should register a new user in the system.

- The following validations should be made:
  - The **first** and **last name** should be **at least 2 characters** long
  - The **username** should be **at least 3 characters** long
  - The **password** should be **at least 6 characters** long
  - The **repeat password** should be **equal to the password**
- After a **successful registration**, a notification message **`"User registration successful."`** should be displayed and the app should **redirect** to the **home page** with the **right navbar**.
- In case of **error** (eg. invalid username/password), an appropriate error **message** should be displayed, and the user should be able to **try** to register again.
- Keep the **user session** data in the browser's **session storage**.



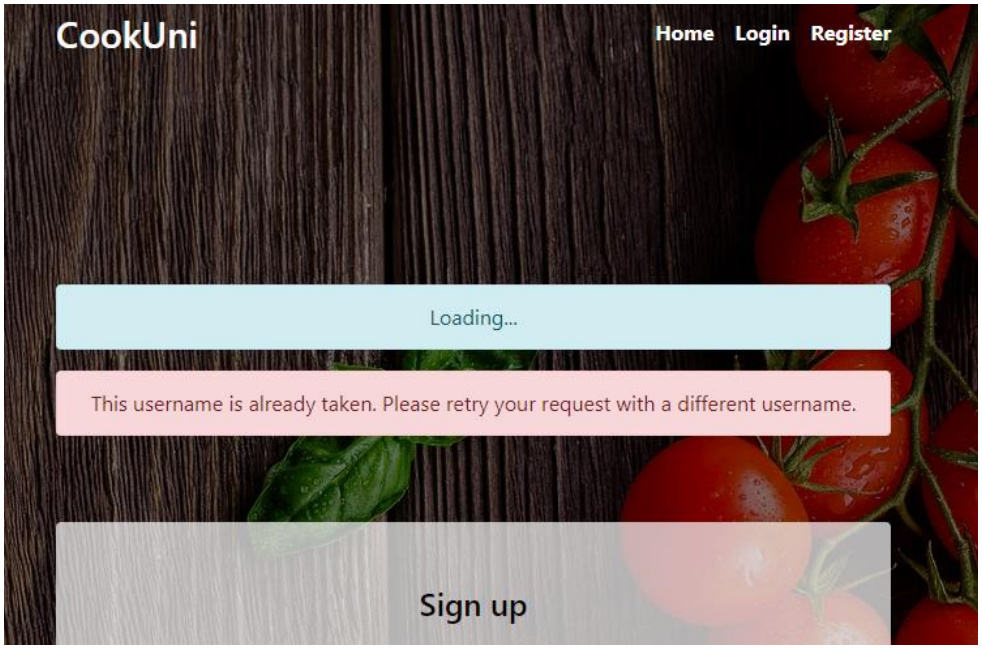
Successful register notification



User registration successful.

Loading...

Error register notification



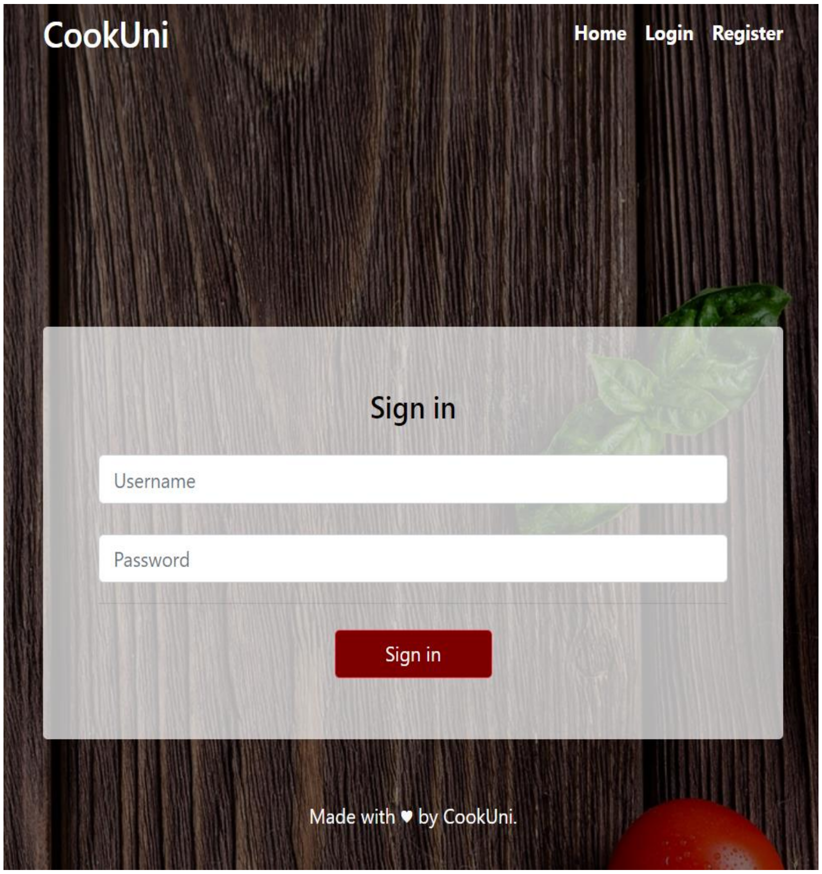
Loading...

This username is already taken. Please retry your request with a different username.

Login Page (Sign In) - 5 Points

By given **username** and **password,** the app should login an existing user.

- After a **successful login**, a notification message **`"Login successful."`** should be shown and the **user home screen** should be displayed.
- In case of **error**, an appropriate error message should be displayed, and the user should be able to fill in the login form again.
- Keep the user session data in the browser's **session storage**.
- Clear **all** input fields after a **successful** login.



Sign in

Username

Password

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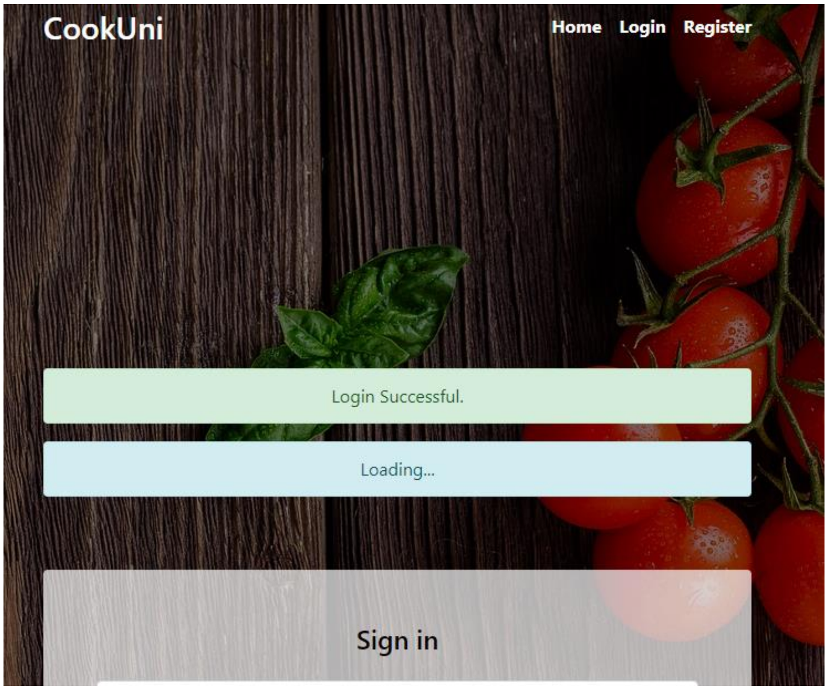
Successful login notification

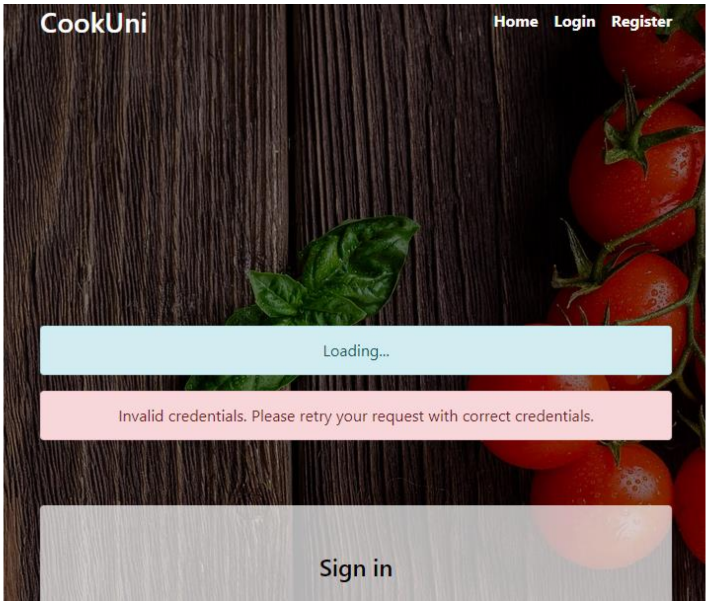


Login Successful.

Loading...

Sign in

Error login notification



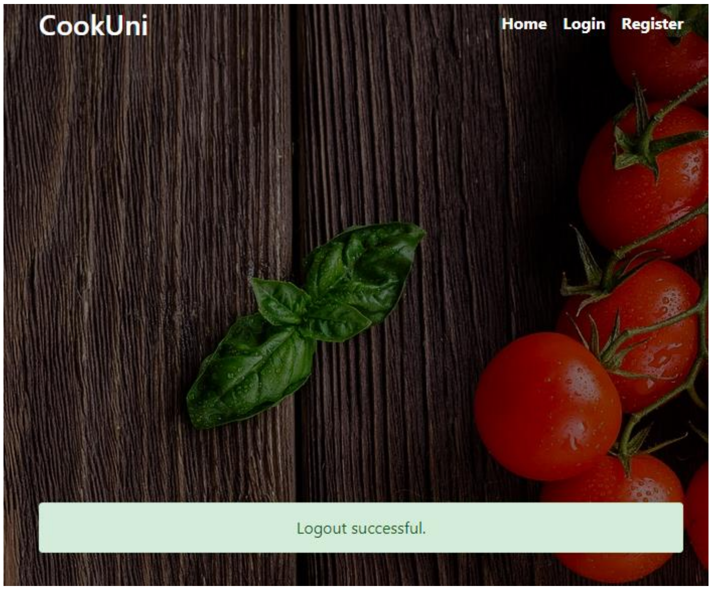
Loading...

Invalid credentials. Please retry your request with correct credentials.

Logout - 5 Points

Successfully logged in users should be able to **logout** from the app.

- After a **successful** logout, a **notification** message **`"Logout successful."`** should be displayed and the **anonymous screen** should be shown
- The **"logout" REST service** at the back-end **must** be called at logout.
- All local information in the browser (**user session data**) about the current user should be deleted.

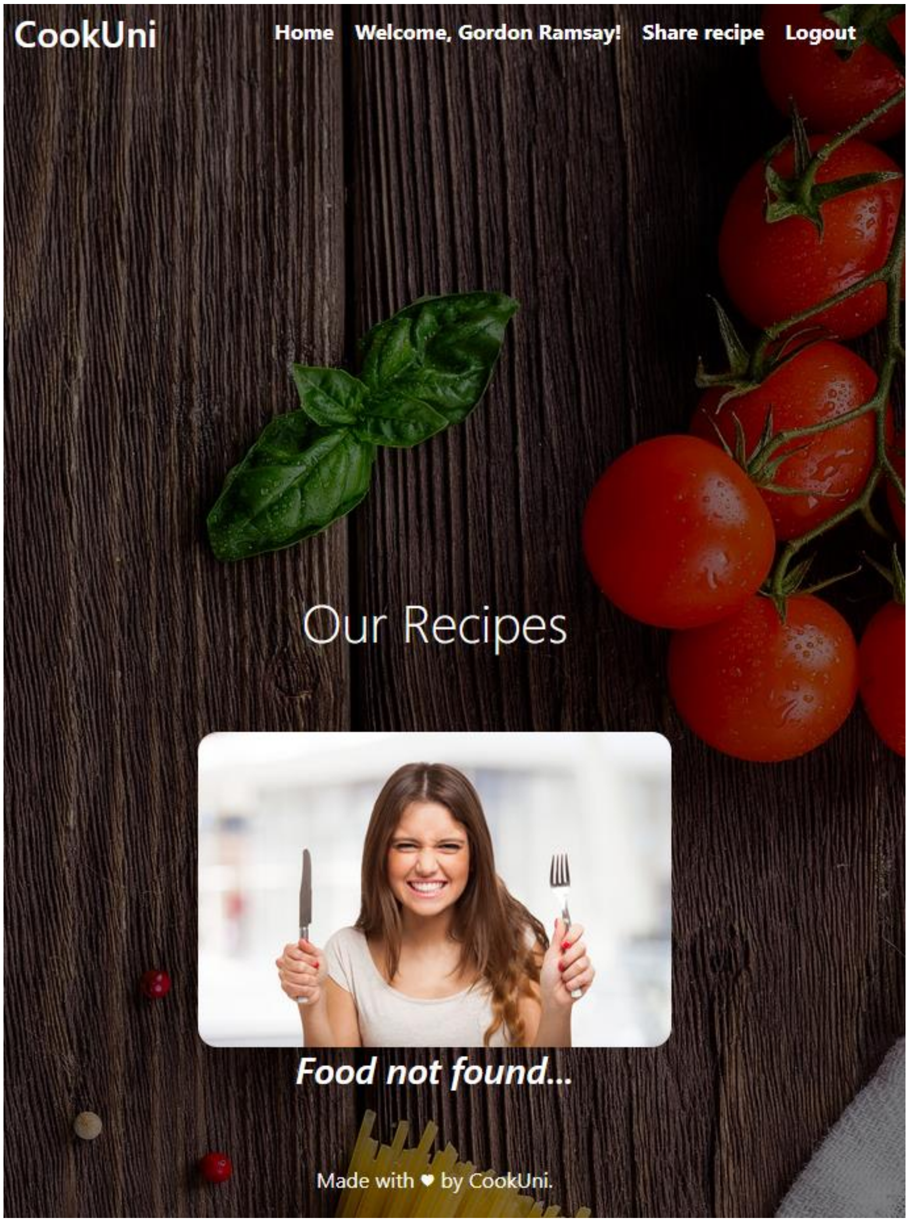


Logout successful.

Home Page - 35 Points

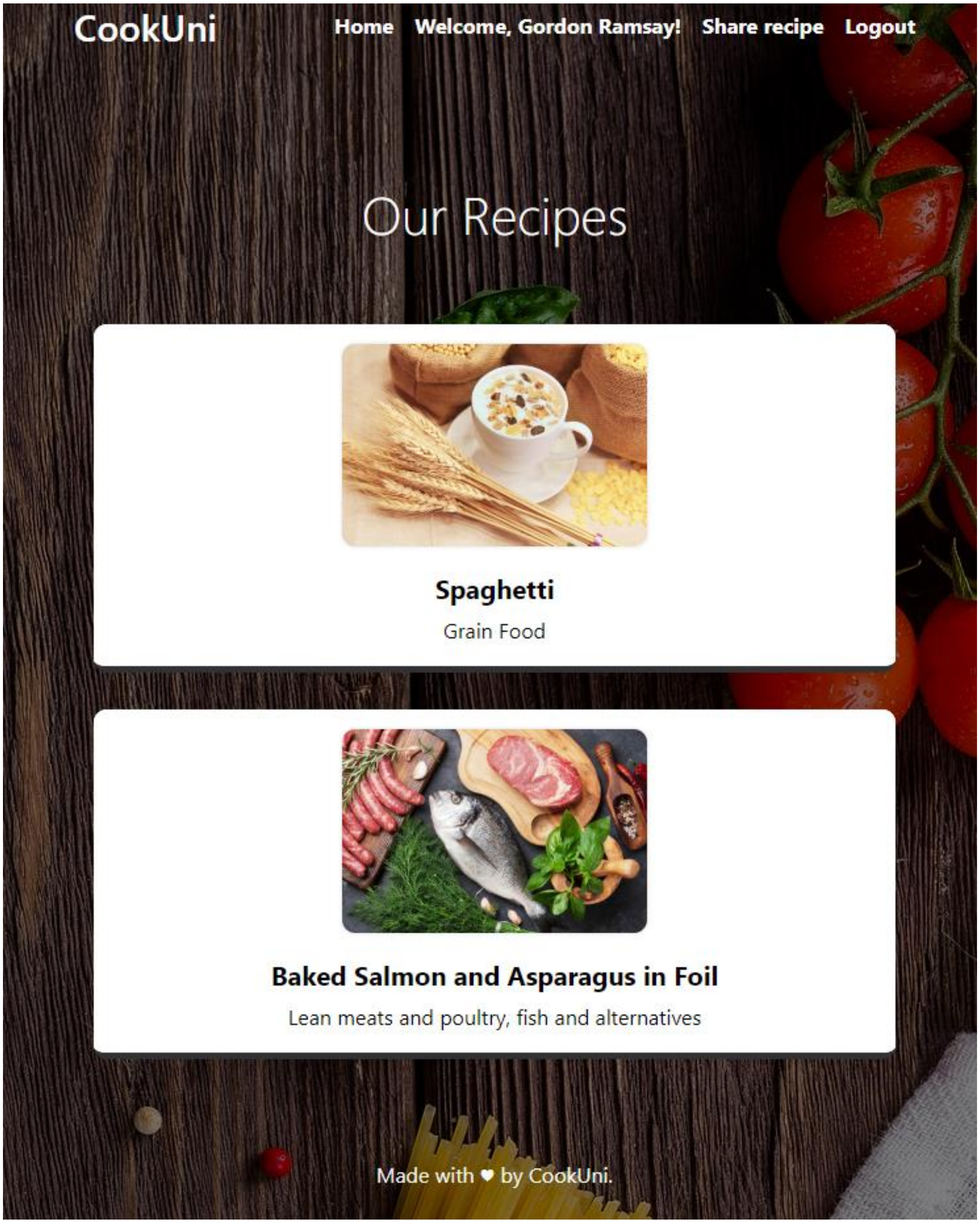
(Logged in with no recipes)

Successfully logged in users should be welcomed by the **home screen**. The right header should be visible ("**Home**", "**Welcome, {firstName lastName}!**", "**Share Recipe**", "**Logout**"). They should also be able to see all created/shared recipes. If there are **no** such recipes, the following view should be displayed.



Home Page (Logged in with recipes)

Successfully logged in users should be welcomed by the **home screen**. The right header should be visible ("**Home**", "**Welcome, {firstName lastName}!**", "**Share Recipe**", "**Logout**"). Also, they should be able to see all created/shared recipes If there is **at least one**, the following view should be displayed:



CookUni

Home Welcome, Gordon Ramsay! Share recipe Logout

Our Recipes

Spaghetti

Grain Food

Baked Salmon and Asparagus in Foil

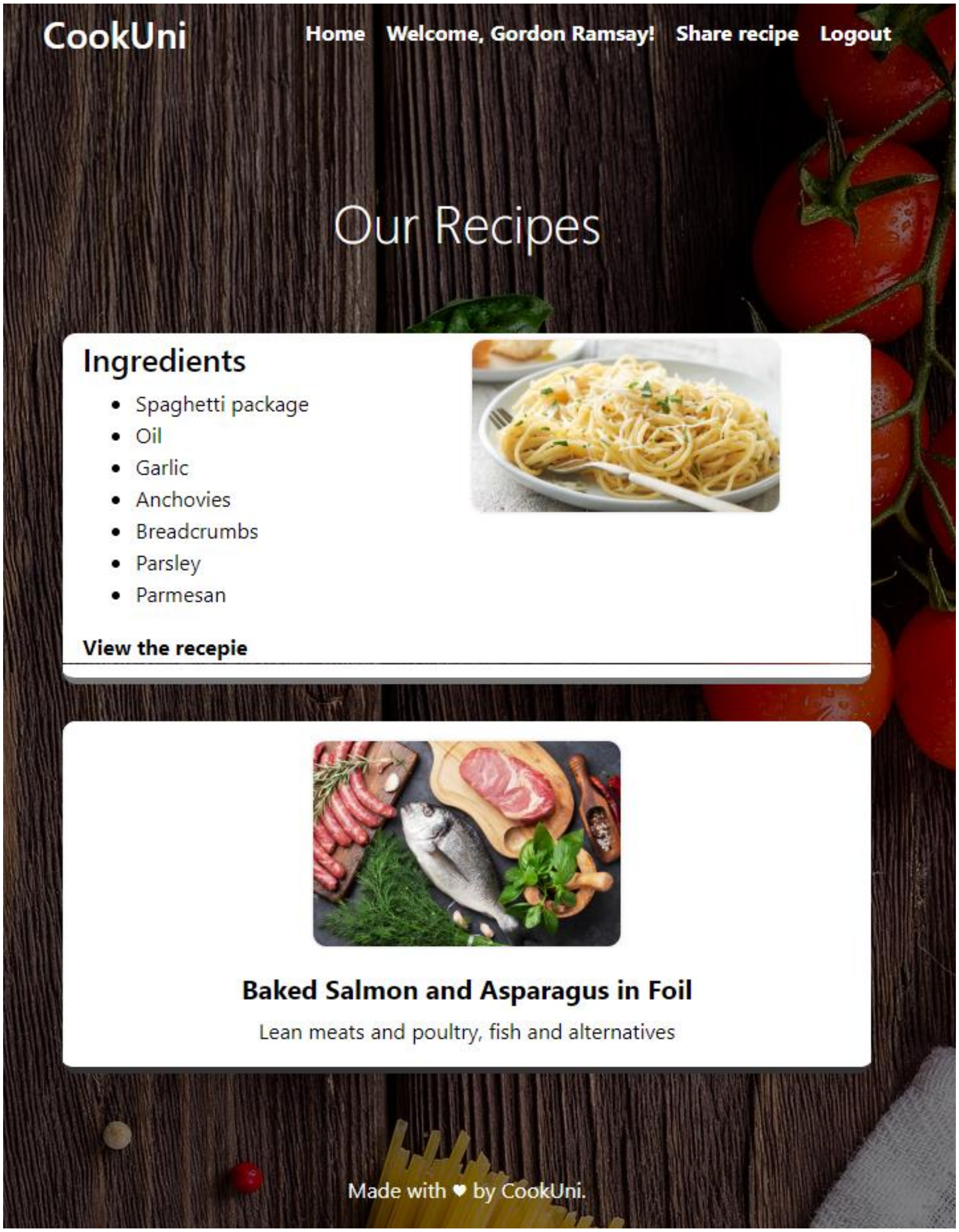
Lean meats and poultry, fish and alternatives

Made with ♥ by CookUni.

Each recipe should have **3 elements**, "**Food Category Image**", "**Meal**" and "**Food Category**"

Home Page (recipe hover)

On hover, the "**`Ingredients`**", "**`Food Image`**" and "**`View the recipe`**" **link** should be displayed.



CookUni

Home Welcome, Gordon Ramsay! Share recipe Logout

Our Recipes

Ingredients

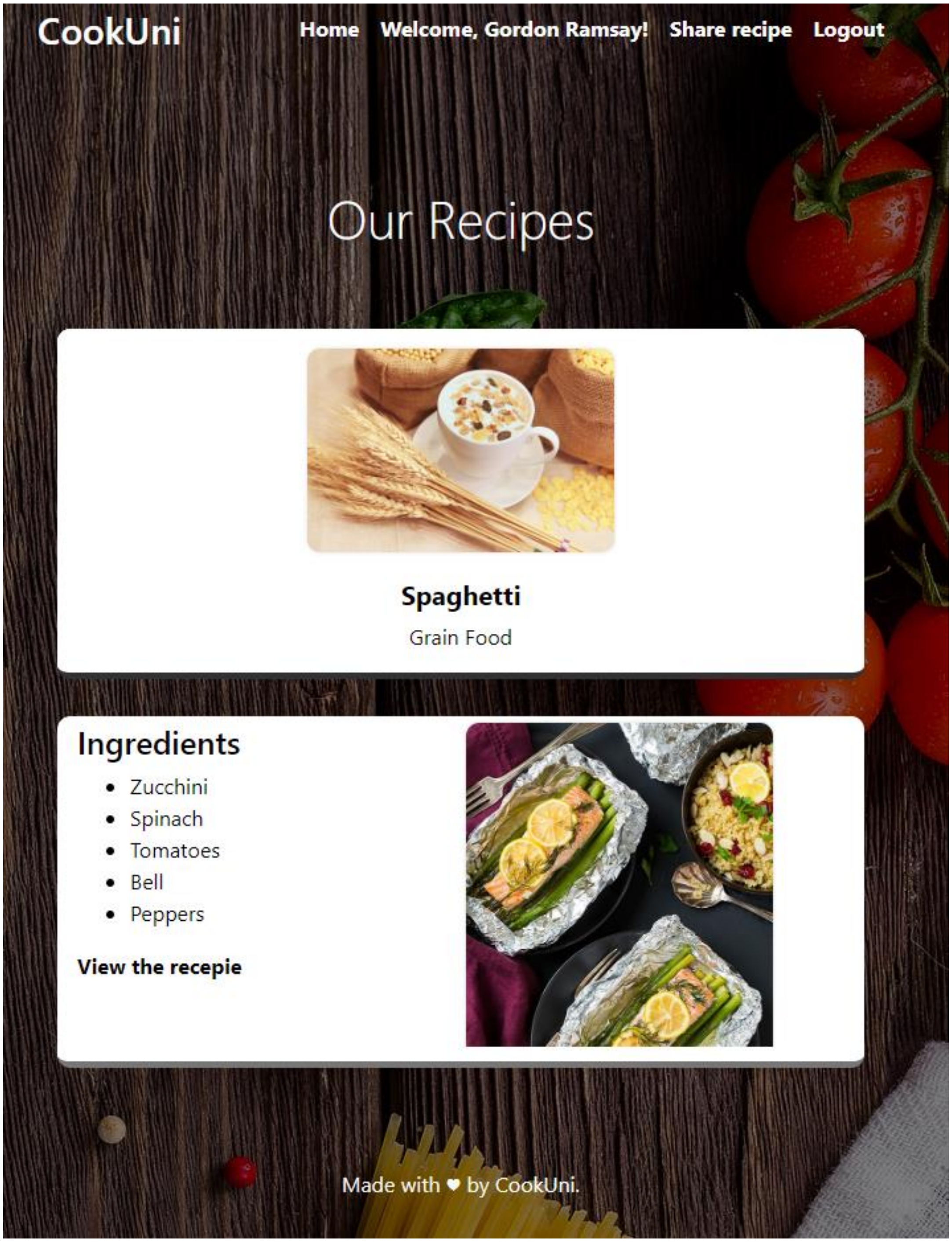
- Spaghetti package
- Oil
- Garlic
- Anchovies
- Breadcrumbs
- Parsley
- Parmesan

View the recepie

Baked Salmon and Asparagus in Foil

Lean meats and poultry, fish and alternatives

Made with ♥ by CookUni.

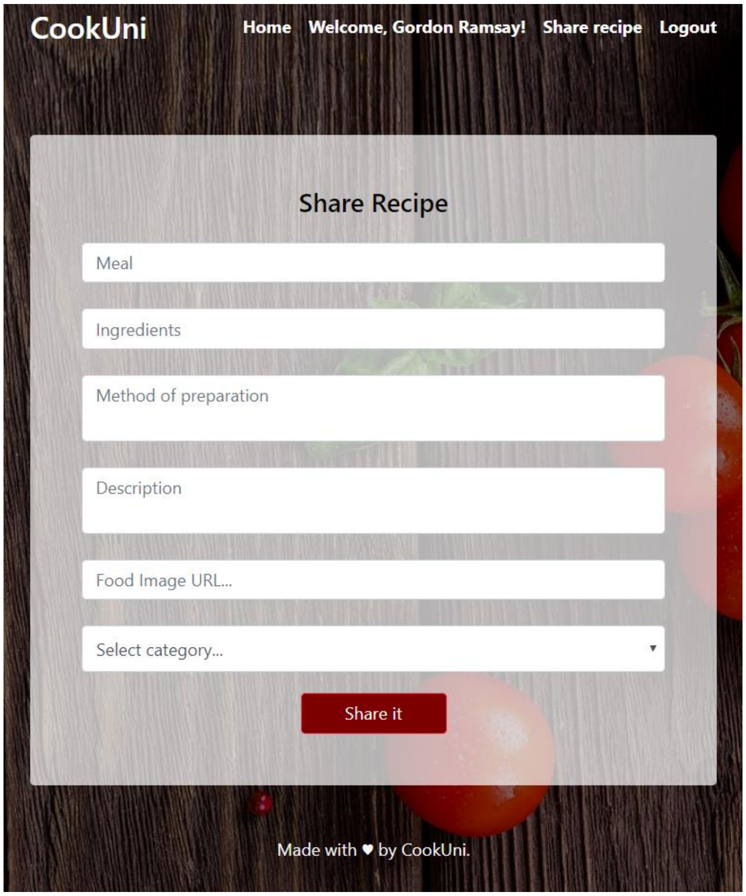


Share Recipe (Create recipe) - 10 Points

Logged in users can **create/share** recipes. Clicking the **`[Share recipe]` link in the navbar** should open a form.

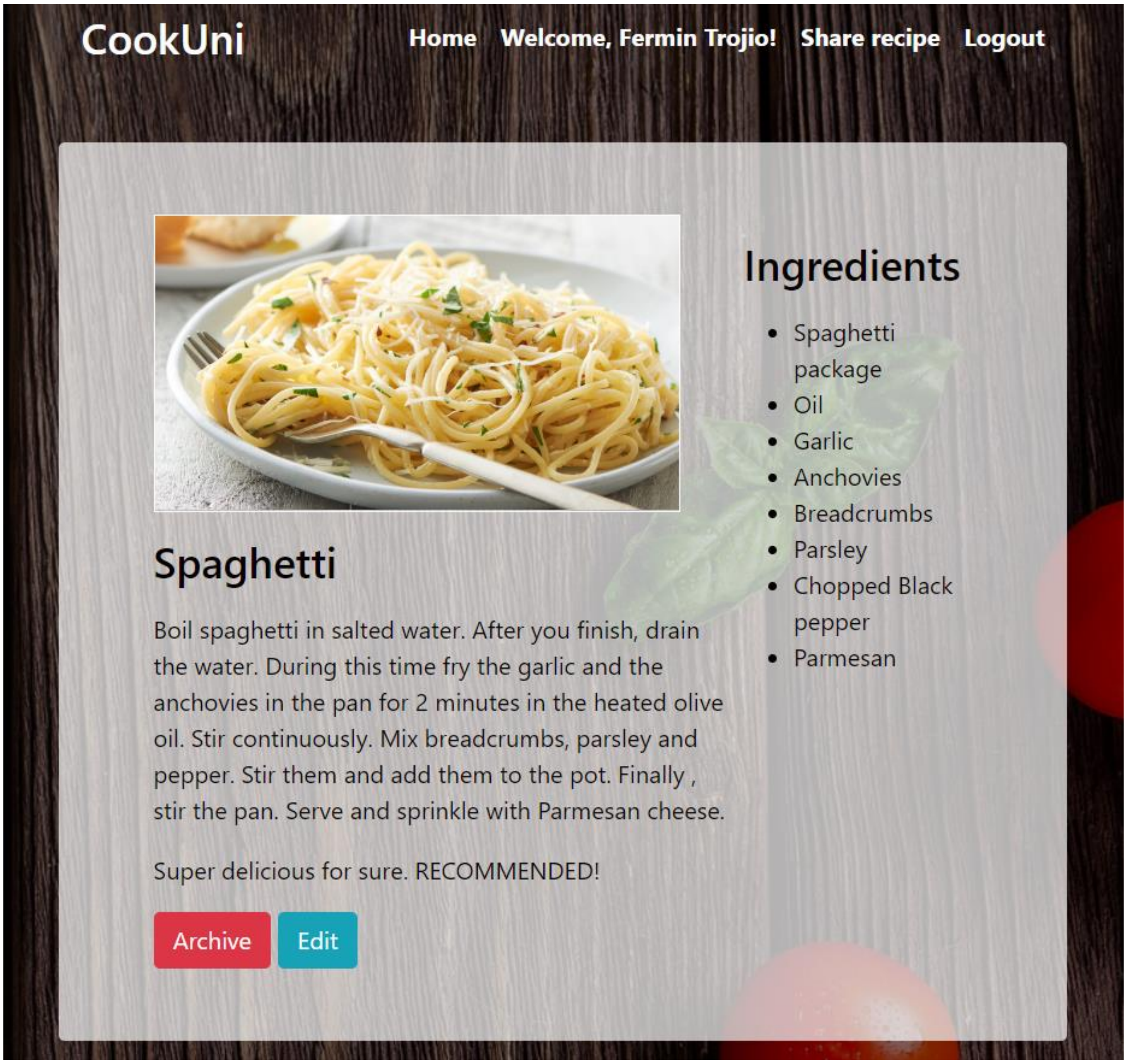
- The following validations should be made:

  - The **meal** ("**string**") should be **at least 4 characters** long.
  - The **ingredients** ("**array**") should **at least 2** (2 elements/2 ingredients)
  - The **preparation method** and **description** ("**strings**") should be **at least 10 characters** long each.
  - The **foodImageURL** ("**string**") should start with **"http://"** or **"https://"**.
  - And **one** of the following **categories** should be selected:
    - **Vegetables and legumes/beans**
    - **Fruits**
    - **Grain Food**
    - **Milk, cheese, eggs and alternatives**
    - **Lean meats and poultry, fish and alternatives**
  - **By default**, every newly created recipe should have additional information:
    - **likesCounter:** number starting from 0;
    - **categoryImageURL:** string representing the current food category URL.
  - After a **successful** shared recipe, a notification message **"Recipe shared successfully!"** should be displayed and the **home view** should be shown.
- The input fields in the form **should be cleared.**
- The newly shared recipe should be stored in the Kinvey collection "**recipes**".



View Recipe (Recipe Details) - 5 Points

Users **should** be able to **view details for every recipe**. Clicking the [`View the recipe`] button on the hovered recipe should **display another view, depending on the authorization.** If the currently logged in user is **the same** as the user who shared that recipe, the **[Archive] [`Edit`] buttons should be visible,** otherwise the [`Like`] **button** should be shown.



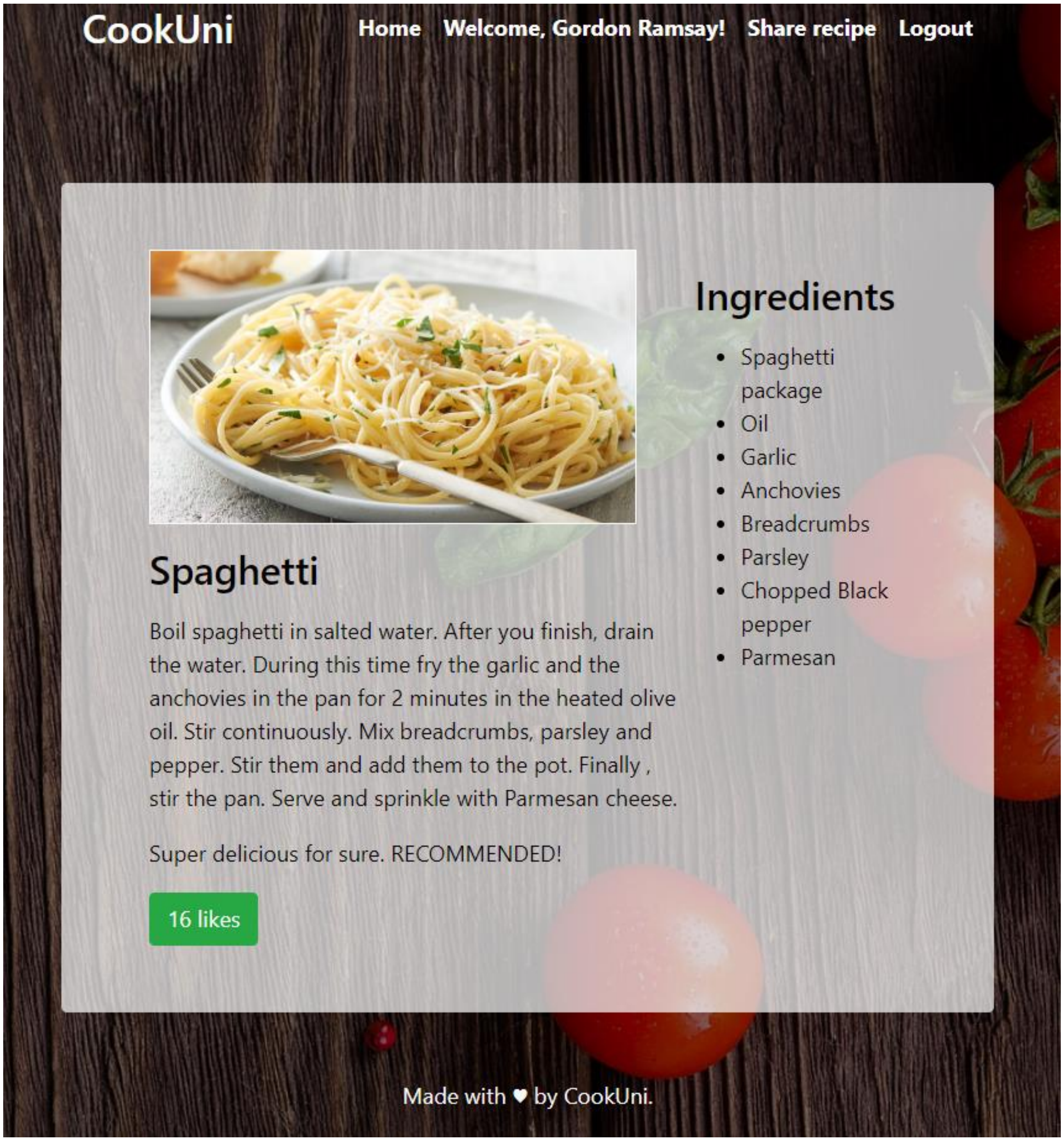
Ingredients

- Spaghetti package
- Oil
- Garlic
- Anchovies
- Breadcrumbs
- Parsley
- Chopped Black pepper
- Parmesan

Spaghetti

Boil spaghetti in salted water. After you finish, drain the water. During this time fry the garlic and the anchovies in the pan for 2 minutes in the heated olive oil. Stir continuously. Mix breadcrumbs, parsley and pepper. Stir them and add them to the pot. Finally , stir the pan. Serve and sprinkle with Parmesan cheese.

Super delicious for sure. RECOMMENDED!



CookUni

Home Welcome, Gordon Ramsay! Share recipe Logout

Spaghetti

Boil spaghetti in salted water. After you finish, drain the water. During this time fry the garlic and the anchovies in the pan for 2 minutes in the heated olive oil. Stir continuously. Mix breadcrumbs, parsley and pepper. Stir them and add them to the pot. Finally , stir the pan. Serve and sprinkle with Parmesan cheese.

Super delicious for sure. RECOMMENDED!

16 likes

Ingredients

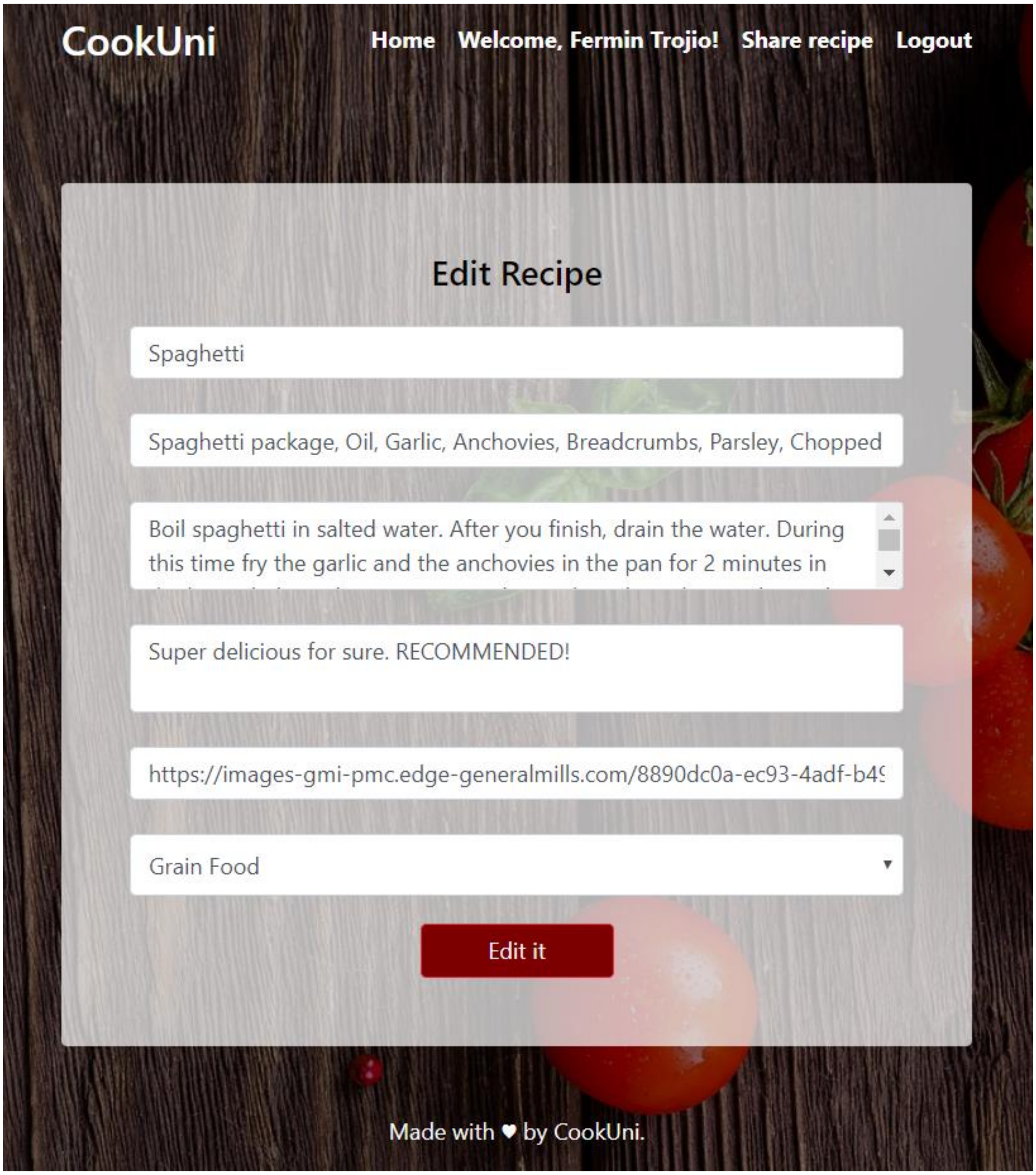
- Spaghetti package
- Oil
- Garlic
- Anchovies
- Breadcrumbs
- Parsley
- Chopped Black pepper
- Parmesan

Made with ♥ by CookUni.

Edit Recipe - 10 Points

Logged-in users should be able to **edit their recipes**.

Clicking the [`Edit`] **button** on a **particular recipe** should display the **`Edit Recipe` page** with the already filled in information (the old one). After a **successfully edited recipe**, an appropriate notification should be **displayed** and the user should be **redirected** to the **home page**.



Edit Recipe

Spaghetti

Spaghetti package, Oil, Garlic, Anchovies, Breadcrumbs, Parsley, Chopped

Boil spaghetti in salted water. After you finish, drain the water. During this time fry the garlic and the anchovies in the pan for 2 minutes in

Super delicious for sure. RECOMMENDED!

https://images-gmi-pmc.edge-generalmills.com/8890dc0a-ec93-4adf-b49

Grain Food ▾

Archive (Delete) Recipe - 5 Points

Users can **archive** their **own** shared recipes, by clicking the [**`Archive`**] button. After a successfully archived recipe:

- The current recipe should be **deleted** from the page and the Kinvey's **`recipes`** collection
- A notification with the following message should be shown: "**`Your recipe was archived.`**" and the user should be redirected to the **home page**.

Like Recipe - 5 Points

Users can **like others shared recipes**, by clicking the [**`Like`**] button. After a successfully liked recipe:

- The current recipe's **`likesCounter`** should be **increased by 1**
- A notification with the following message should be shown: "**`You liked that recipe.`**" and the user should be redirected to the **home page**.

5. Submitting Your Solution

Exclude the **`node_modules`** folder and ZIP your project. Upload the archive to Judge.