IBU International Burch University

CEN 308 SOFTWARE ENGINEERING

PROJECT DOCUMENTATION

PANIC WEB APPLICATION

Prepared by:
Faris Šahović

Proposed to:
Nermina Durmić, **Assist. Prof. Dr.**
Aldin Kovačević, **Teaching Assistant**

1. Introduction

1.1. About the Project

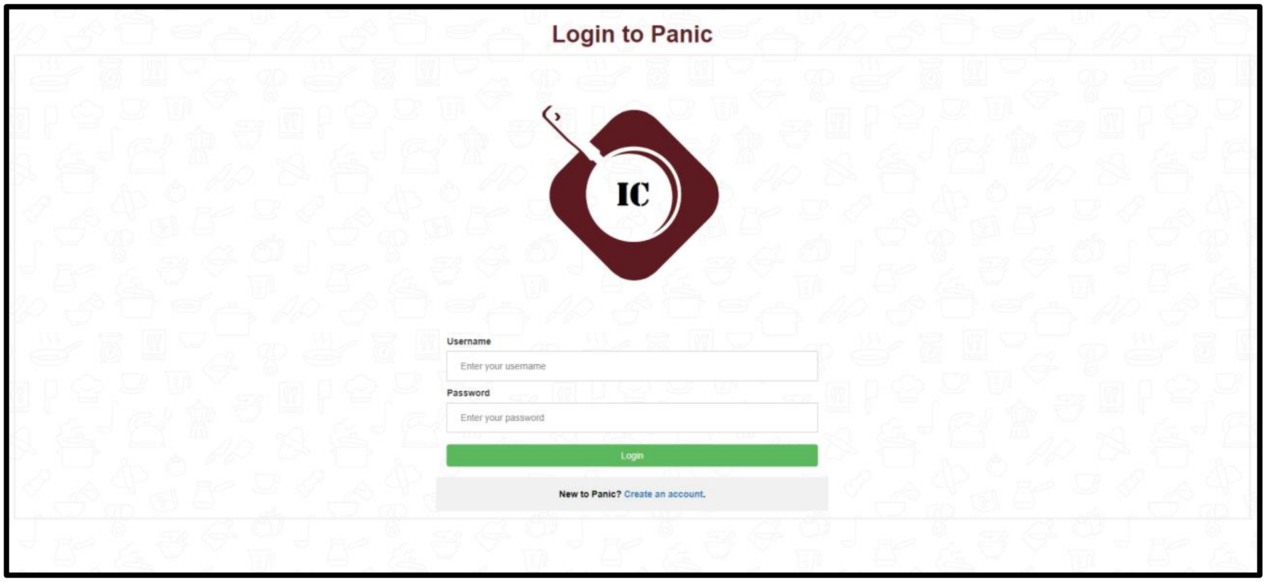
Panic is a web application designed and developed for people that want to learn new cooking recipes or share their own recipes with other users. Application can be used to browse through a variety of individual dishes or cookbooks as a whole, add new recipes, keep track of time for each recipe with a simple timer amongst other functionalities which will be discussed in section 1.2. The deployed version of the application can be found by clicking the following link: https://panic-web-application.herokuapp.com/. Original code can be found in a GitHub repository by clicking the following link: https://github.com/Sferavi/panic-web-app.

1.2. Project Functionalities and Screenshots

Panic has a number of features that a user can utilize. All of them are self-explanatory and intuitive to use, so there will be no need for detailed explanation, but instead they will be listed in the following paragraph.

Main features include:

- User registration and login
- Adding personal recipes
- Editing personal recipes
- Delete personal recipes
- Search recipes via “search bar”
- View/browse recipes from whole community
- Check recipes as favorite by using “star icon”
- View detailed information about a recipe by clicking on its title/image
- Start, Stop and Reset a timer while cooking
- Create a cookbook
- Edit a cookbook
- Delete a cookbook
- Edit your profile information



New to Panic? Create an account.

Figure 1: Login page

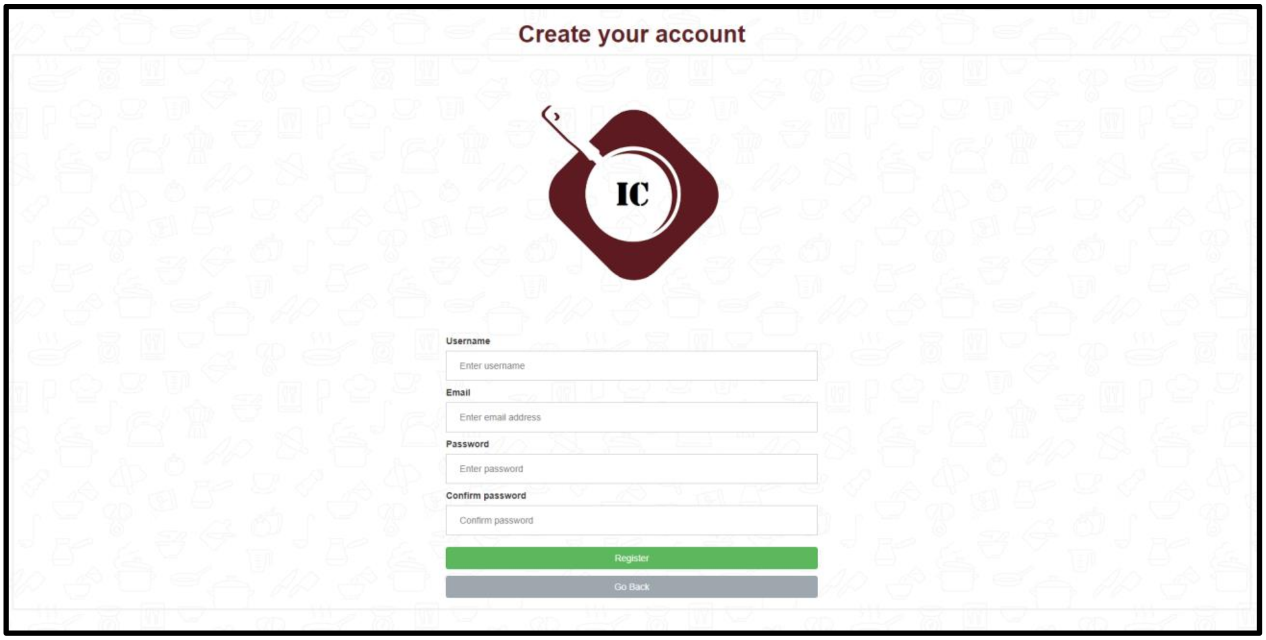
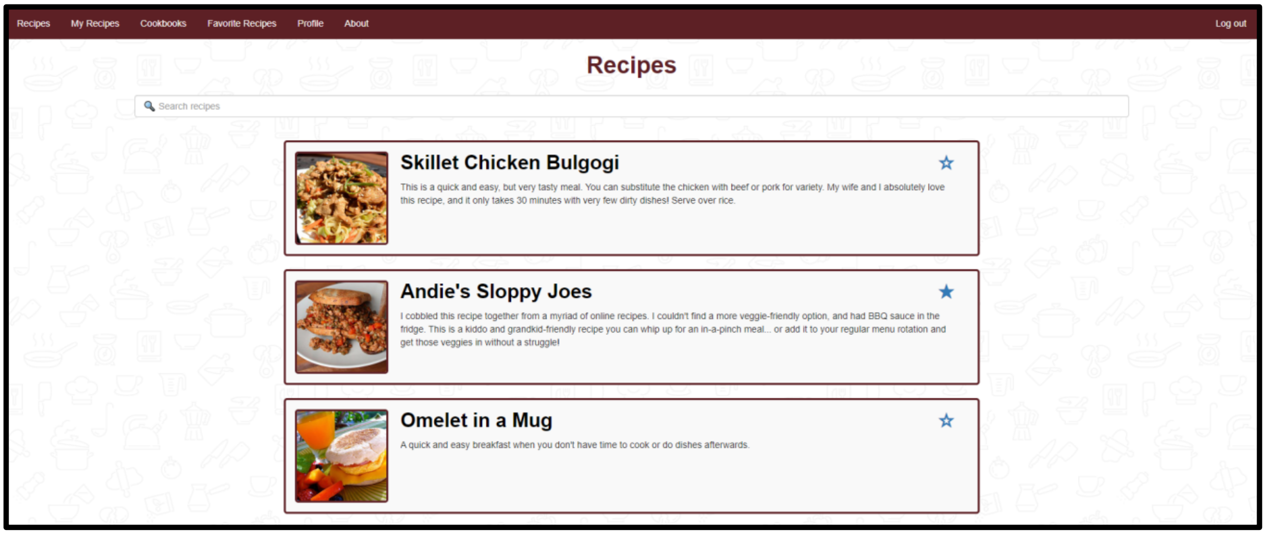


Figure 2: Register page



Recipes

Skillet Chicken Bulgogi ☆

This is a quick and easy, but very tasty meal. You can substitute the chicken with beef or pork for variety. My wife and I absolutely love this recipe, and it only takes 30 minutes with very few dirty dishes! Serve over rice.

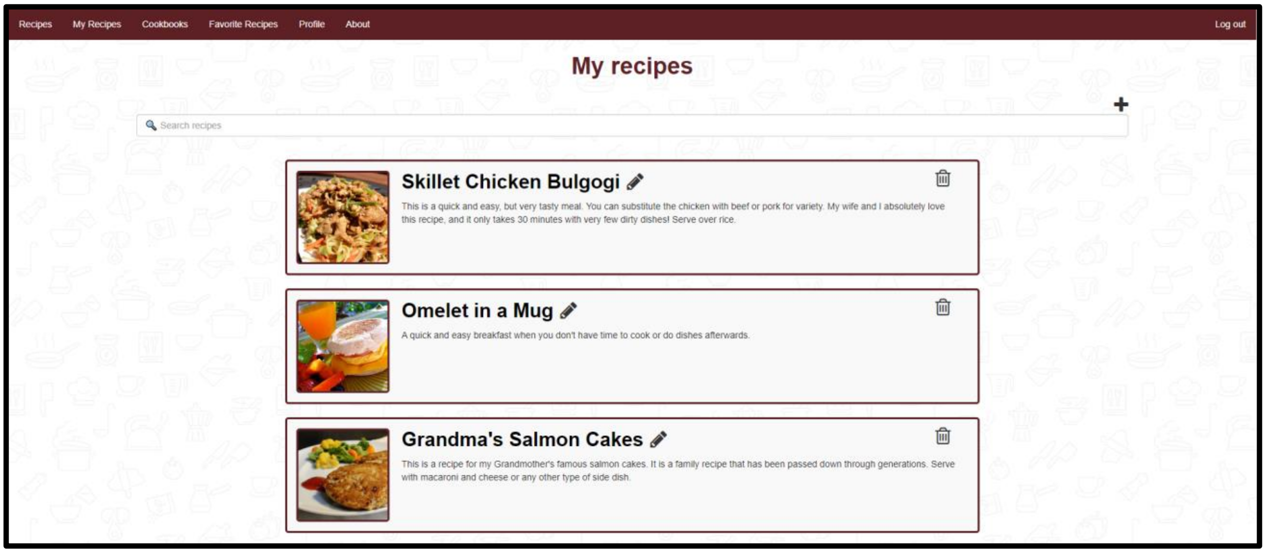
Andie's Sloppy Joes ★

I cobbled this recipe together from a myriad of online recipes. I couldn't find a more veggie-friendly option, and had BBQ sauce in the fridge. This is a kiddo and grandkid-friendly recipe you can whip up for an in-a-pinch meal... or add it to your regular menu rotation and get those veggies in without a struggle!

Omelet in a Mug ☆

A quick and easy breakfast when you don't have time to cook or do dishes afterwards.

Figure 3: Recipes page



My recipes

Skillet Chicken Bulgogi

This is a quick and easy, but very tasty meal. You can substitute the chicken with beef or pork for variety. My wife and I absolutely love this recipe, and it only takes 30 minutes with very few dirty dishes! Serve over rice.

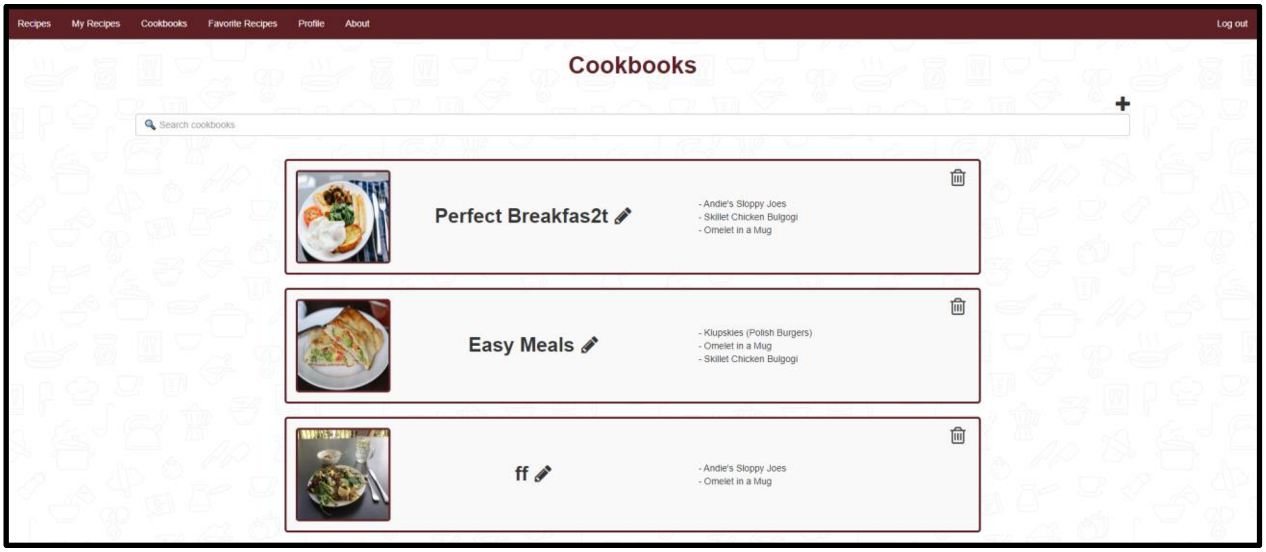
Omelet in a Mug

A quick and easy breakfast when you don't have time to cook or do dishes afterwards.

Grandma's Salmon Cakes

This is a recipe for my Grandmother's famous salmon cakes. It is a family recipe that has been passed down through generations. Serve with macaroni and cheese or any other type of side dish.

Figure 4: My Recipes page



Cookbooks

Perfect Breakfas2t

- Andie's Sloppy Joes
- Skillet Chicken Bulgogi
- Omelet in a Mug

Easy Meals

- Klupskies (Polish Burgers)
- Omelet in a Mug
- Skillet Chicken Bulgogi

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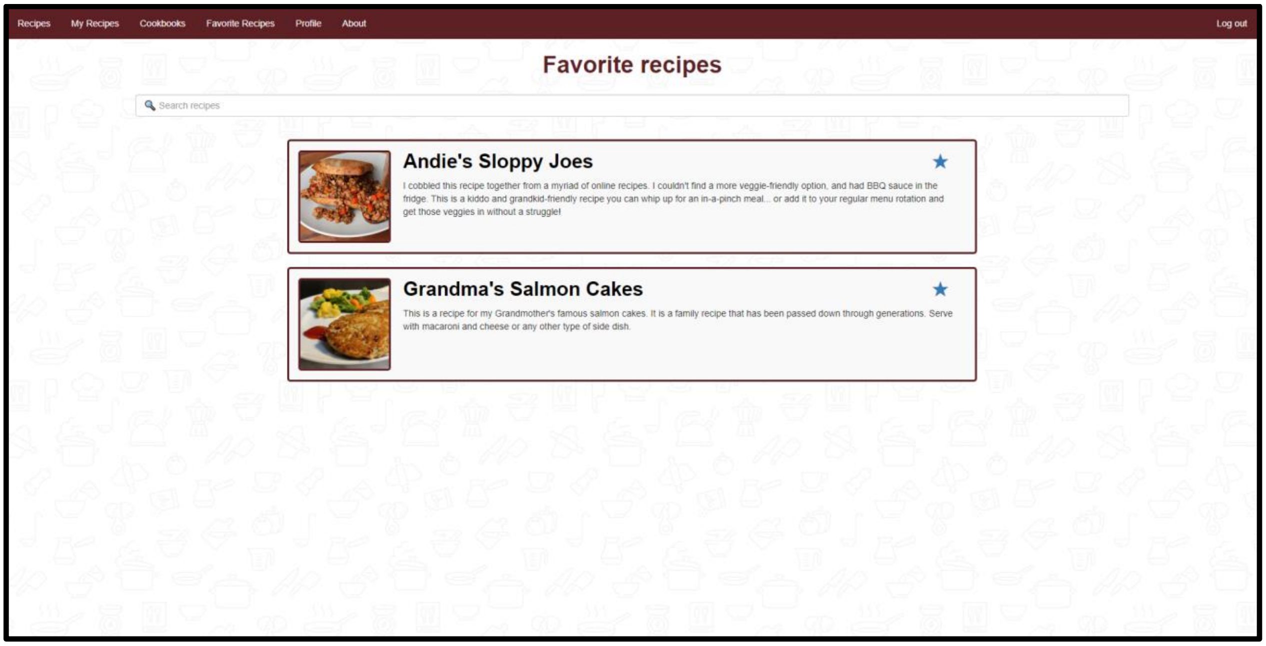
- Andie's Sloppy Joes
- Omelet in a Mug

Figure 5: Cookbooks page



Favorite recipes

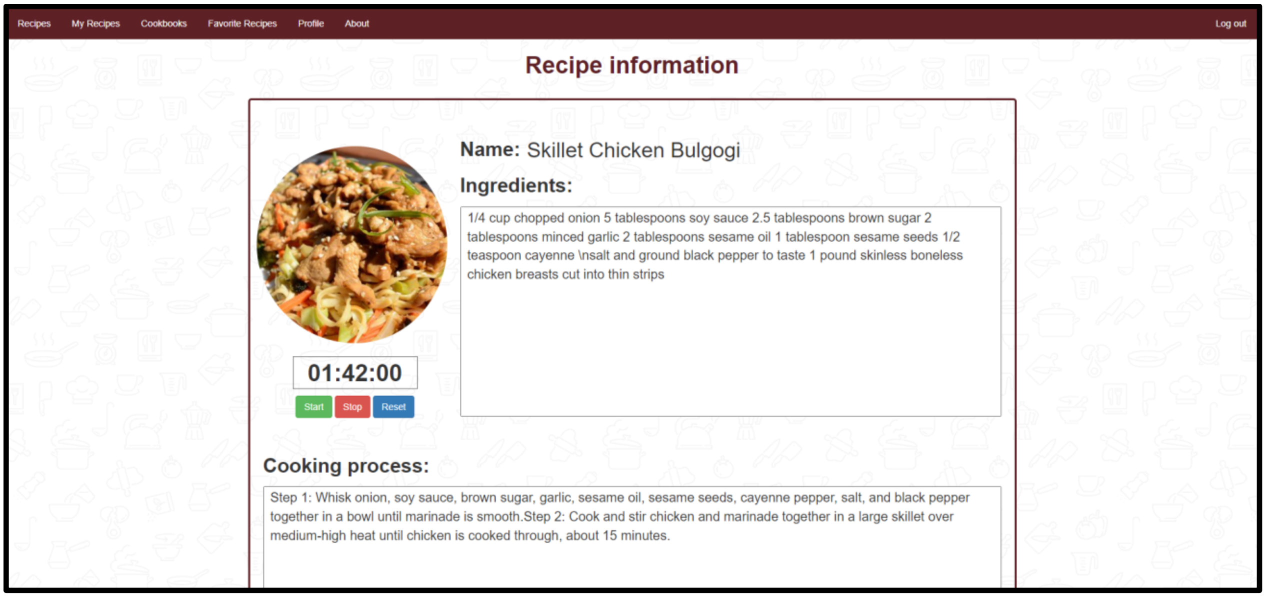
Andie's Sloppy Joes

I cobbled this recipe together from a myriad of online recipes. I couldn't find a more veggie-friendly option, and had BBQ sauce in the fridge. This is a kiddo and grandkid-friendly recipe you can whip up for an in-a-pinch meal... or add it to your regular menu rotation and get those veggies in without a struggle!

Grandma's Salmon Cakes

This is a recipe for my Grandmother's famous salmon cakes. It is a family recipe that has been passed down through generations. Serve with macaroni and cheese or any other type of side dish.

Figure 6: Favorite recipes page



Recipe information

Name: Skillet Chicken Bulgogi

Ingredients:

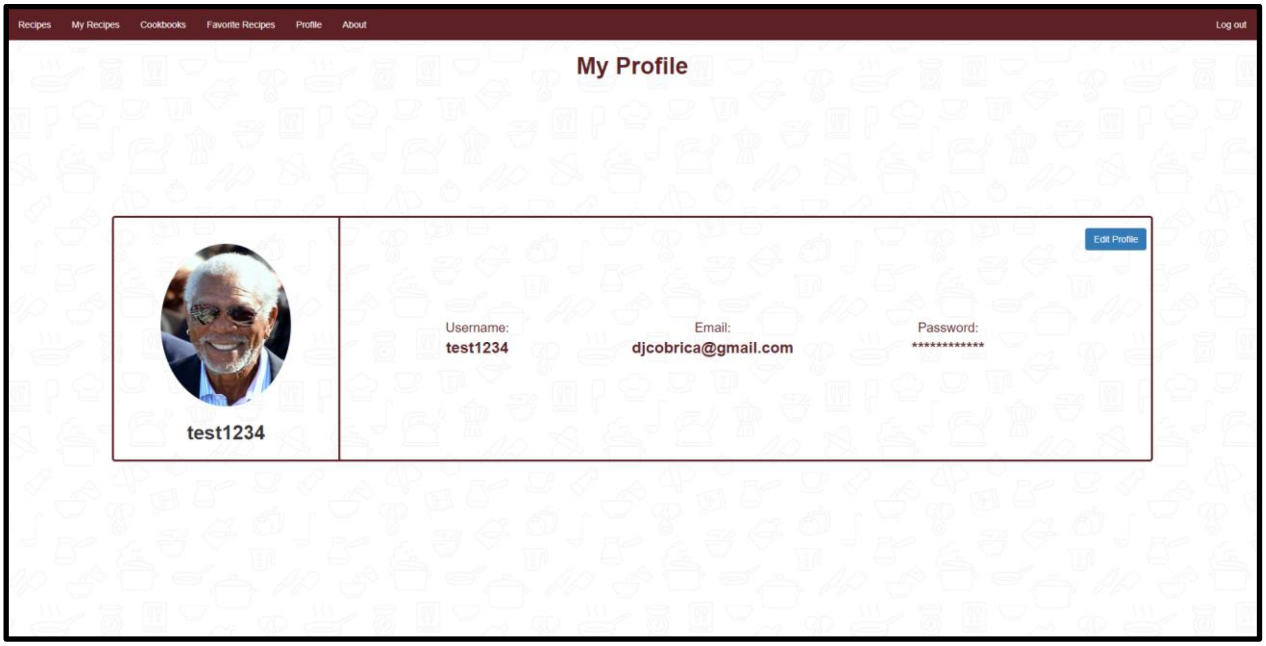
1/4 cup chopped onion 5 tablespoons soy sauce 2.5 tablespoons brown sugar 2 tablespoons minced garlic 2 tablespoons sesame oil 1 tablespoon sesame seeds 1/2 teaspoon cayenne \nsalt and ground black pepper to taste 1 pound skinless boneless chicken breasts cut into thin strips

01:42:00

Cooking process:

Step 1: Whisk onion, soy sauce, brown sugar, garlic, sesame oil, sesame seeds, cayenne pepper, salt, and black pepper together in a bowl until marinade is smooth.Step 2: Cook and stir chicken and marinade together in a large skillet over medium-high heat until chicken is cooked through, about 15 minutes.

Figure 7: Recipe Information page



My Profile

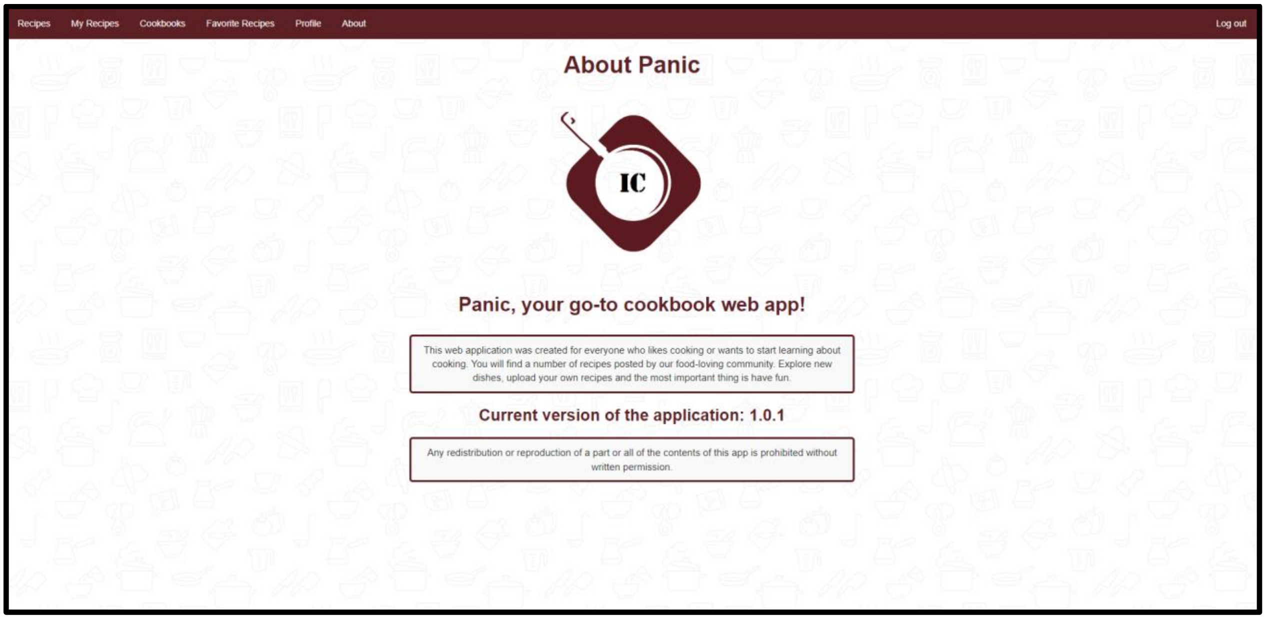
test1234

Username: **test1234**

Email: **djcobrica@gmail.com**

Password: *************

Figure 8: My Profile page



About Panic

Panic, your go-to cookbook web app!

This web application was created for everyone who likes cooking or wants to start learning about cooking. You will find a number of recipes posted by our food-loving community. Explore new dishes, upload your own recipes and the most important thing is have fun.

Current version of the application: 1.0.1

Any redistribution or reproduction of a part or all of the contents of this app is prohibited without written permission.

Figure 9: About page

2. Project Structure

2.1. Technologies

Following were used on **frontend** side:

- HTML
- CSS
- JS(jQuery)

Following were used on **backend** side:

- PHP
- FlightPHP

And as for the **database** SQL was used.

The PHP coding standard that was chosen for this project is **PSR-12**. The other parts were structured in accordance with current best practices.

2.2. Database Entities

Following names were used for the tables in the database:

- users
- recipe_info
- cookbook_info
- recipe_images
- cookbook_images

If you want to see whole structure of the database you can login with the following credentials:

Host: `b4zzxkr9fffwwfrkjvo6-mysql.services.clever-cloud.com`
Dbname: `b4zzxkr9fffwwfrkjvo6`
Username: `uyxpxfendji046sl`
Password: `nK5Y4t8uV9UJVVVJ7bcp`

2.3. Architectural Pattern

Architectural pattern chosen for this project is called Layered pattern. It is commonly used in most of the current web applications on the market. As the name says, the system is organized in multiple layers where related features are associated with each layer.

Decision behind choosing this architectural pattern is overall simplicity and flexibility. As a pattern its main advantage is that it is easy to do implementations which makes it also flexible if in the future a decision is made to make this project even richer with features and content.

2.4. Design Patterns

Design patterns chosen for this project are the following:

- **DAO (Data Access Objects)** pattern: used in backend, in all of the files which are in folder **rest/dao**
- **Observer** pattern: used in backend, in the following file:
    - rest/Subject.php
    - rest/Mail.php
    - rest/NewRegistrationNotifier.php
    - rest/index.php

2.4.1. DAO pattern

Throughout the project basic CRUD operations were used. To avoid making index.php files hard to read and readjust in the future Data Access Object pattern was used. DAO pattern in general reduces coupling between Business logic and Persistence logic.

2.4.2. Observer pattern

This pattern was used to keep administrator/manager notified when a new user registers. The manager gets an email, which removes the need for them to go through the database to find that user. If they still need more information about them, the whole process gets easier, since one of the provided pieces of data in the email is their username, which can be used as a searching parameter.

3. Conclusion

In conclusion, I believe that my overall project implementation was on a satisfactory level. Features implemented into the web application are simple and intuitive to use. Every project has room for improvement, and so does mine. Some parts of the project were intentionally left on a much smaller scale than they would be in a real development environment, since it is a university project and only free sources were used. The example I can give is with uploading pictures to the database, they take a lot of space and free hosts limit you with space, which is only natural.Personally, the most difficult part on this whole journey was figuring out how to make the app as responsive as it can be and giving easy visual cues to the user to make it more understandable.

Finally, it was really exciting to work on this project, because as the project grew from the idea so did my knowledge.