CEN 308 SOFTWARE ENGINEERING

PROJECT DOCUMENTATION

“Online cake shop”

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1. Introduction

1.1. About the Project

"Online cake shop" is web application for online buying product from our website. It is used for ordering specific product and specific quantity of it. Customers are able to choose product, select quantity of product/products and add it to cart, check the total price in cart and make an order. If customer don't want all the product from the cart, they can remove it from it and proceed with order. While admin of the page is able to login on the website and check list of all orders and remove them if it's done. Link where to application is deployed is the following: https://seproject-ajla-kenan.herokuapp.com/. Also in README file in our GitHub repository: https://github.com/Arnaa1/SEProject is full description of our project, so please also check it before you use the link of Heroku app.

1.2. Project Functionalities and Screenshots

Here we will list all the features of our app.

List of main features:

- Listing of all product on the homepage
- Add quantity of product
- Add addition for a specified product
- Add to cart product
- List of all products with total price in cart
- Remove product from cart
- Checkout from cart
- Entering name, email, and home address to confirm order and get receipt in return
- Admin login panel (username: ajla, password: ajla123)
- Listing of all orders on admin panel
- Removing orders on admin panel

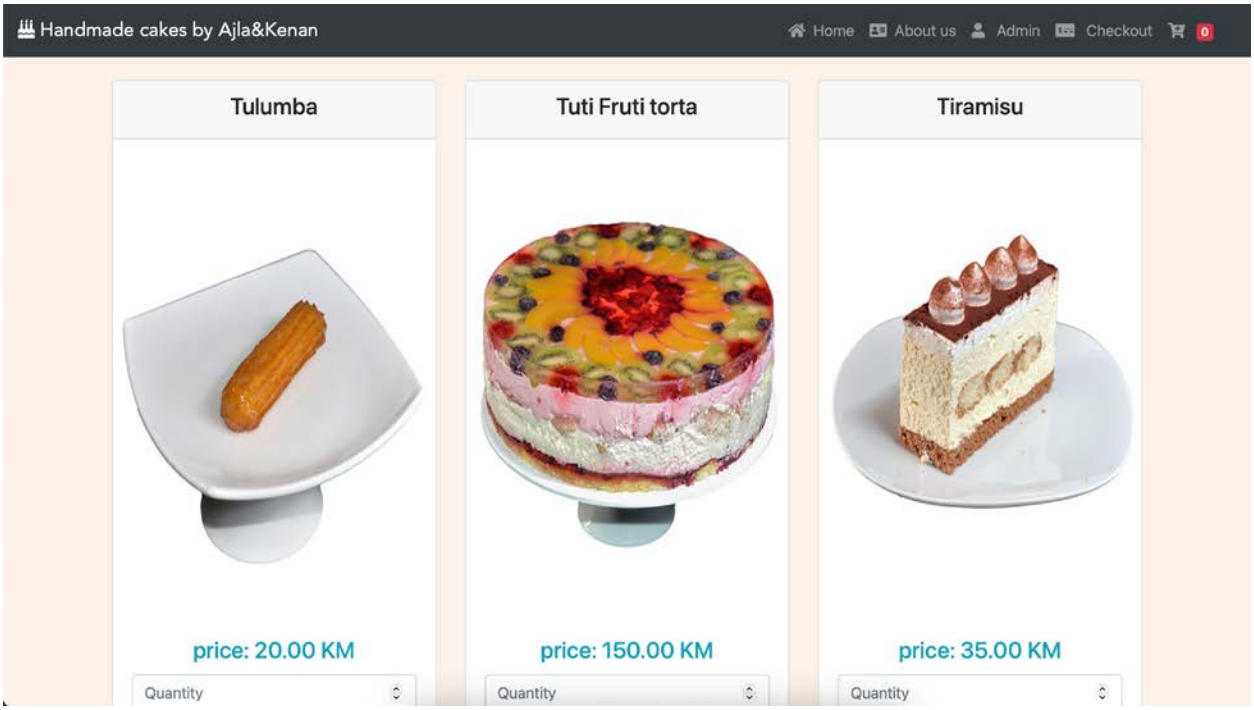

Figure 1: Homepage

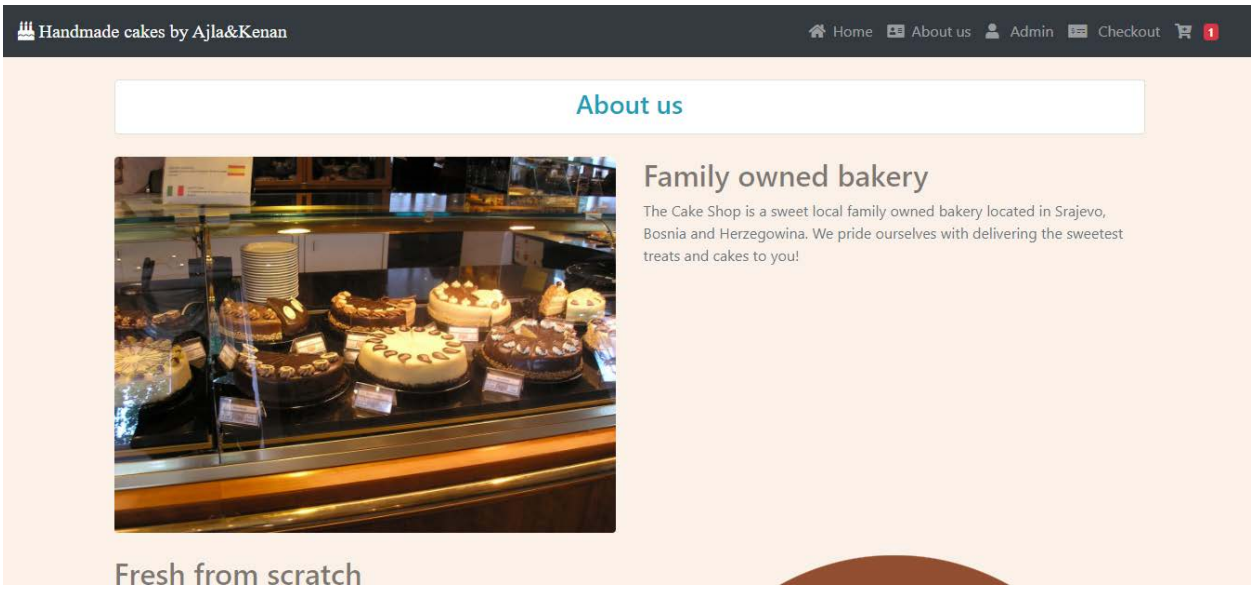

Figure 2: About us page

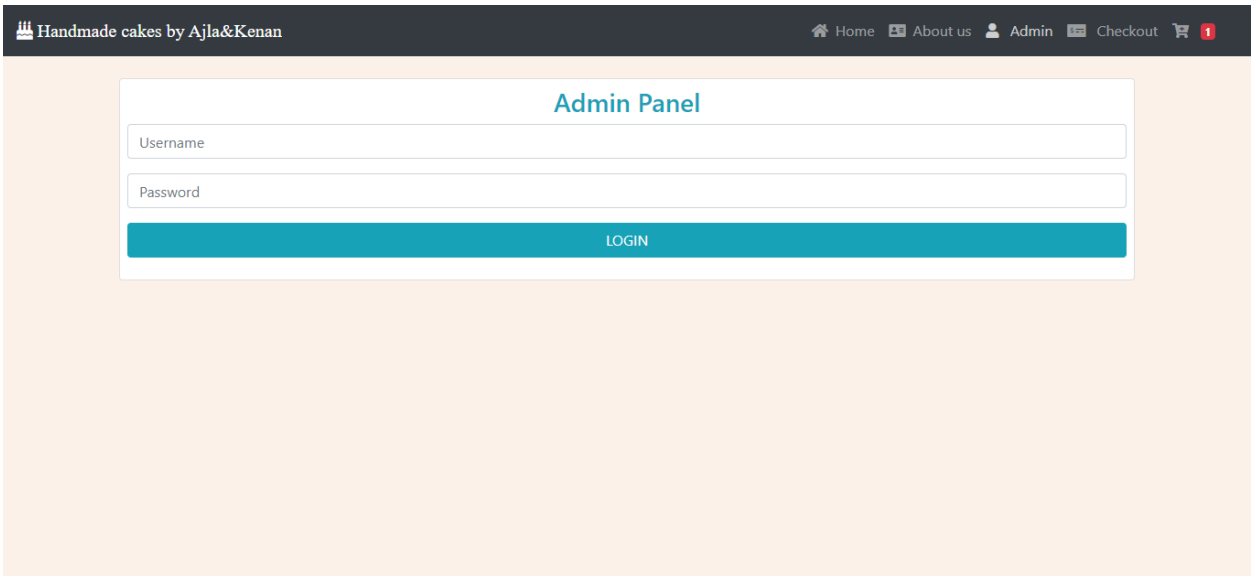

Figure 3: Admin registration page

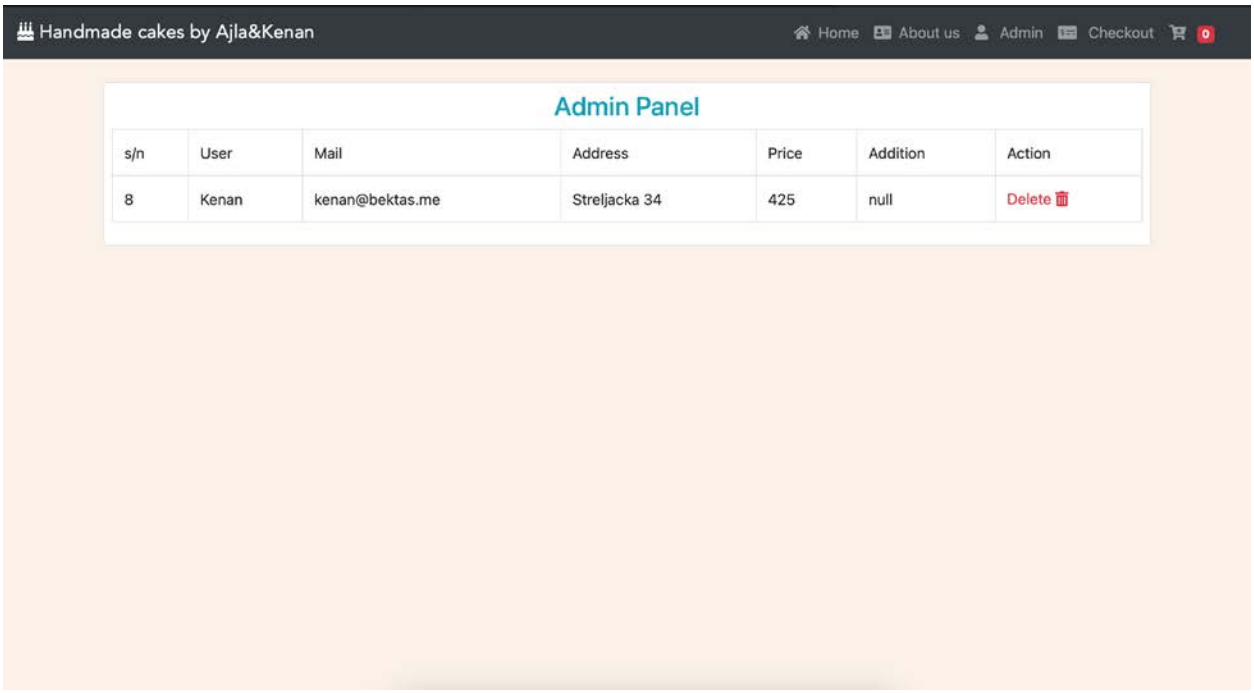

Figure 4: Admin panel

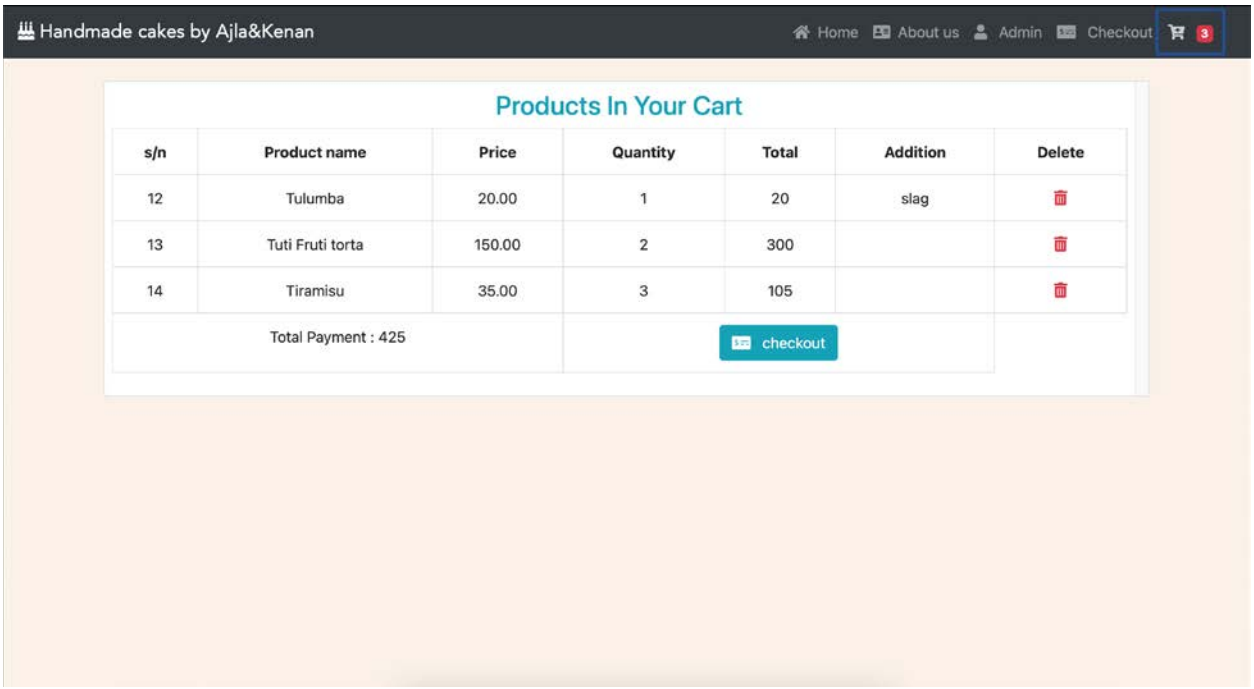

Figure 5: Cart page

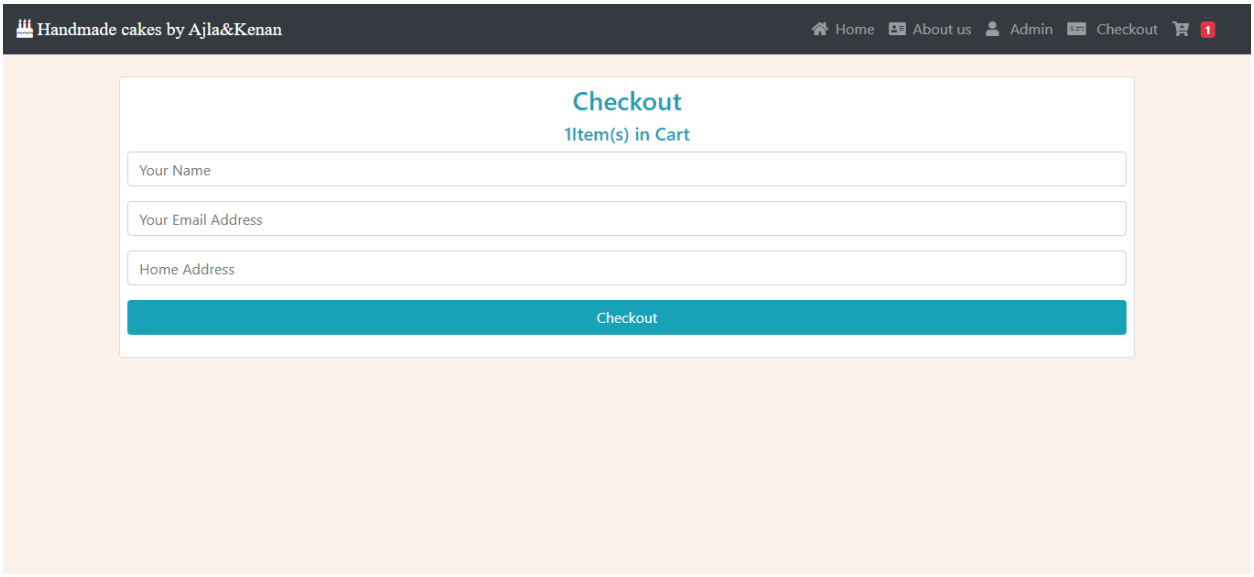

Figure 6: Checkout page

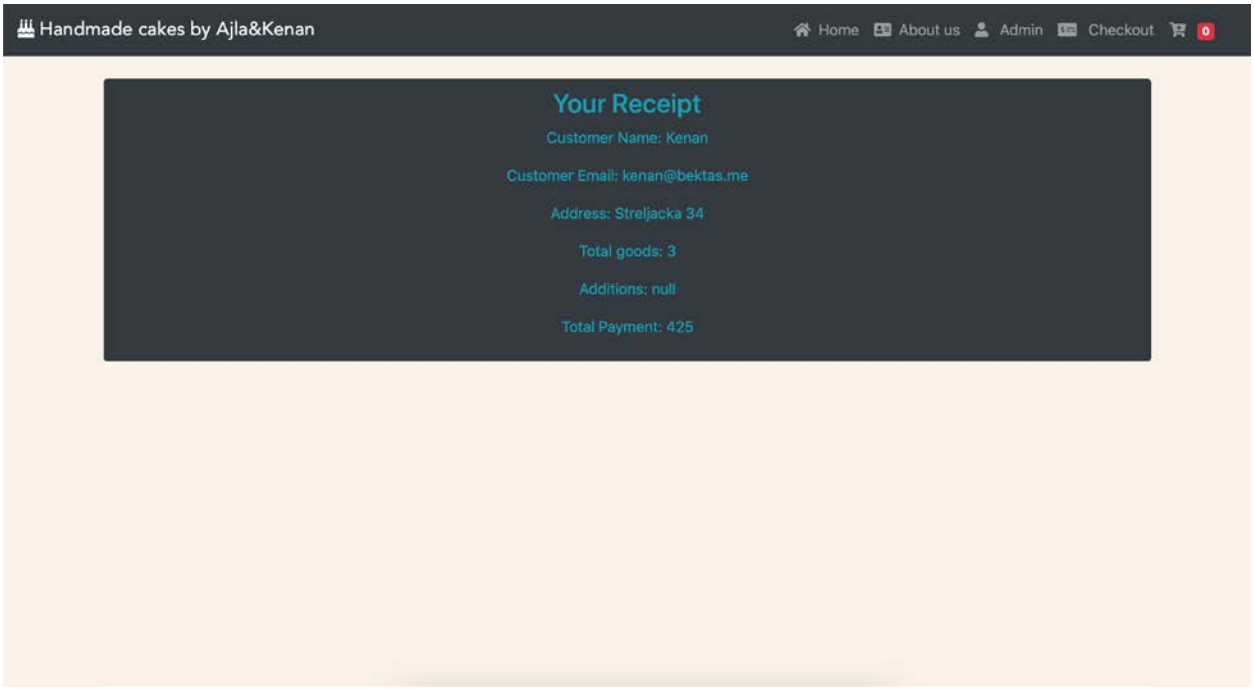

Figure 7: Receipt

2. Project Structure

2.1. Technologies

Technologies which we have used in the project are:

- HTML & CSS
- Bootstrap, JQuery, SPApp
- PHP and FlightPHP
- SQL database
- Java, Selenium test

For PHP we have used PSR-2 coding standard. As for the others, we have structured the code according to the best practices in each of them.

2.2. Database Entities

Table names in our database are:

- Cart
- Orders
- Products
- .
- .

2.3. Architectural Pattern

Architectural Pattern which we have used in this project is called Model-view-controller pattern. This pattern is also known as MVC pattern, divides an interactive application in to 3 parts as:

- Model – contains the core functionality and data
- View – display the information to the user
- Controller – handles the input from the user

This is done to separate internal representations of information from the ways information is presented to, and accepted from the user. It decouples components and allows efficient code reuse.

2.4. Design Patterns

Design pattern which we have used in this project are:

- Builder Pattern: used in Cookie.php
- Singlton pattern: used in ConnectDb.php

2.4.1. Builder Pattern

Builder pattern is located in Cookie.php. In there, we can find construction for the cake: name, price, quantity, addition. Builder pattern is called in dao.php, first the data from the input form entered by the user is accepted and then the data is being accommodated into the pattern, after which the data is being withdrawn from that pattern and moved for request into the database.

2.4.2. Singleton Pattern

Singleton pattern is located in ConnectDb.php. In there, we can find construction of the data for connection with database and function for connecting with the database. This pattern is used while transferring the data from the cart table to orders table. While calling this pattern, connection with a database is being developed and then the query is being executed.

3. Conclusion

In this project we implemented many things and we are satisfied with the overall project implementation. It was such an interesting project where we also used design patterns to make our code simplier and Selenium tests. This site could be used in real environment for online cake shop with few more simple feature implementations. Out plan for the future is to implement few of those features as well as improvements on already existing code and receive feedback from real users according to their observations.