# Programming 4 assignment report - <Zhang Runyan>

**Implemented features (list what features you completed, you can include also any quality improvement you did to your code):**

①The website realizes the user registration and login function.

②The website provides a basket interface, users can select the desired fruit to add to the shopping cart, so that it can be convenient for subsequent purchase.

③The fruit can be purchased directly through the product listing interface. Before payment, the confirmation information screen will pop up, and the name, address, number and other information written in the previous registration will be filled in automatically. Clicking Buy will result in an order with "Shipped".

④Customers can rate and leave comments on their purchases on a scale of 0-5.

⑤Customers can see the top five rated and top five purchased fruits on the home page.

⑥Users can classify fruits based on sales volume and price.

⑦The home page has a small house icon, click this icon to return to the home page. Clicking on "Fruit Shopping Mall" will take you to the product screen, where you will see 12 different fruits, each with a name, a picture, and a price.

**Provide a short description how to use your user interface (user guidance on how to use your coursework, including configuratons, settings or anything needed to run the coursework):**

The compiler I used was vscode. The website is dynamic and contains a front-end framework and a back-end database. I chose to use spring boot, thymeleaf, and bootstrap for the framework design. The design css files are available as separate files and as packages that come with bootstrap. After the code is compiled correctly, click "Run" to run the main method. After running successfully, open the website: **http://localhost:8081**, and you will see the main interface of the designed web page.

In the upper right corner of the page, you can see the user who is not logged in. Click to select the registration or login function. Registration will fill in the name, number, address, email and other information, after successful login to the home page. After login, the vscode console will display "Login Success". The home page will have four looping pictures, as well as the top5 best-selling and top5 rated fruits.

Click "Fruit Shopping Mall" to jump to the commodity interface, you will see a total of 12 different fruits, each with pictures and the corresponding price and description. On the front page, you can see some of the data that was saved before because I did a lot of testing, for example, some fruits already have ratings and feedback. Users can sort fruits from highest to highest based on sales and reviews, and from lowest to highest based on price. Click "Add to basket" to add the fruits you need to the basket, and the display "Add to basket successfully" will pop up. Click "Buy" on the product display screen, you will jump to the confirmation of the order information interface, the interface has automatically filled in the registration information, including the delivery address, consignees and email. Click "Pay", because there is no designed payment interface, so directly pop up "purchase success!" prompt. Open "Order", the user can see the fruit that has just been successfully paid.

If you want to leave feedback on the fruit, click "Feedback" to leave your comment, and you can also give the score you want. The page tracks both the number of times a product was ordered and the number of reviews. Click "Sales volume" or "Feedback" to see the number of related fruits in the mall sorted from most to least. The top five fruits are also displayed on the home page.

**Known bugs and limitations:**

①Open the shopping cart interface, it will display the fruit just added to the shopping cart, but because there is no payment interface, the interface can only read but not do the next step.

②The comments left by the user are not displayed, only the number of comments posted.

③If you select "Remember password" when logging in, you need to click the login twice, will not directly jump to the mall interface.

④The Euro logo of the unit price on the basket interface and the order interface cannot be placed behind the number. I have been adjusting it for a long time, but I do not understand how to solve it. But it doesn't affect the look.

⑤Some of the blue links that do not open are that I did not continue to do the jump interface, not an error or can not open.

**Other issues and feedback:**

The design of this website does not have the grand atmosphere on the market, but there is an old Chinese saying, "Although a sparrow is small, it has all the viscera". This means that even if something is small, it covers everything you need. Just like the website I designed this time, I want to make a fruit mall. Naturally, as a big country of agricultural trade, China does not lack fruits, but the export quantity of fruits has been increasing in recent years, so I want to make a website of fruit mall, and introduce some fruit prices and their impressions to you. I specifically collected the price of fruit per kilogram in Finnish supermarkets on the Internet, and made the design of the corresponding amount of money.

The website designed may not have a very novel UI interface, but it is a website that I have done very hard. It basically covers the needs of the homework, and some basic functions and additional functions can be basically realized. The website page of this design has Chinese flavor, concise and clear layout, and the introduction of each fruit is clearly visible. Although there are no complicated decorations, the page contains all the required functions. This time, I only completed the fruit mall, which may appear to have fewer items. If I have the opportunity in the future, I can try to make more and try some new foods.