ENSE 374

Group Name: Team LaForge

Group Member: Zhimu Li, Jiabo Zhang, Xufeng Liu

Project Instructor: Dr. Tim Maciag

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Project Final Report

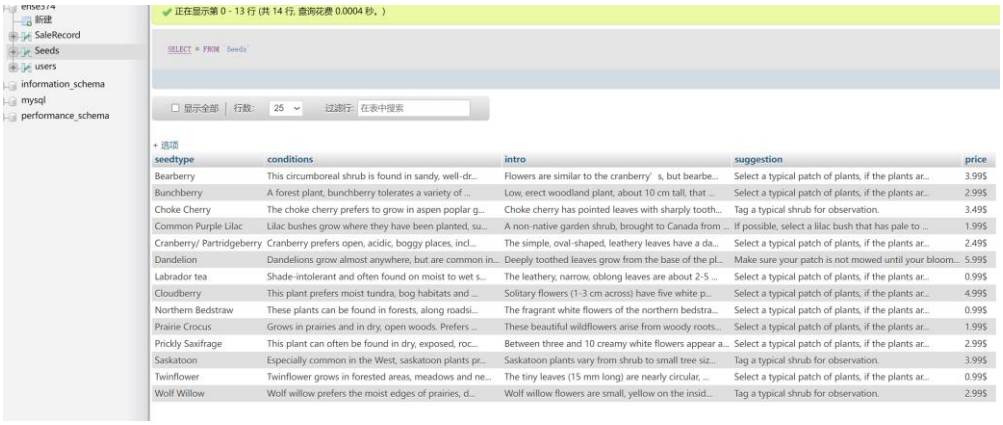
Project Introduction

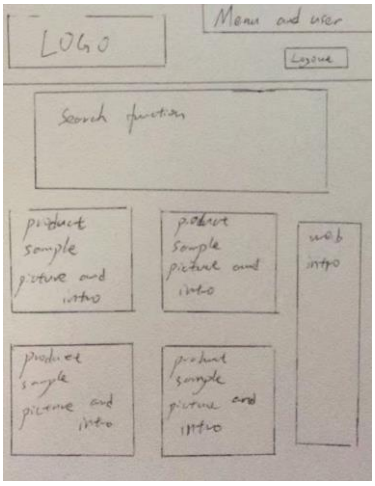
Business Opportunity:

Because of the less stressful living environment, there are also many gardening enthusiasts in the city. And our website can provide customers with a quantity and diverse supply of seeds. Due to the long winters in Canada, the diversity of climatic conditions and soil types, planting will not be easy for any gardener, so the our websites also can provide detailed information about all kinds of seeds. Customers can search for their favorite seed types and learn related planting conditions and methods on the website. Otherwise, even people can buy seeds from other places, like Superstore. However, the diversity of seeds is limited and it cannot satisfy people who really love planting and gardening. Our sale website can provide customers with a quantity and diverse supply of seeds.

Initial MVC:

Our project is the online seeds shopping website. The model for the core of our project is about customers information(id, username, email.etc), seeds detailed wiki(introduces seeds for environmental needs), and sale records from customers(seeds, customers, dates, transaction amount, demand, etc), when we do the project, we will create tables to store those data. Secondly, the view of website is that after general register and login pages, customers will come to our main page. The main page will introduce the diverse types of our products and customers information will display at side of the page or corner, it also has a search function on top of page to help customer to view products. If customers select one of the product, page can show the detailed information to customs and a purchase area. Then, the controller part is about how we process the data. Of course, the register and login pages can store and read customer information and show part of them to next pages. The main page and the purchase pages receive the our products information and display. After making purchase, we will store a sale history about who, when, what, how many,etc.





Project Progress

Team members roles:

PROJECT ROLES AND RESPONSIBILITIES		
Project Name	Project SEED	
Name	**Role**	**Responsibilities**
Zhimu Li	Back-end Developer Update GitHub Project model Server and Database	Build an available server and database for website. Store all detailed information about product Complete all documents required and update them to GitHub
Xufeng Liu	Back-end Developer Project controller JavaScript	Interact the view and model. Complete the search and purchase functions.
Jiabo Zhang	Front-end Developer Vlog producer Project view HTML and CSS	Complete website design Site layout and content Produce and edit all vlogs (Include login/logout pages, users' pages, main page, and product pages.)

Team's exploration:

1. Project server: Our group rent a CentOS 7 as our project public server. Then we installed the MariaDB and phpMyAdmin to build our database. In the original plan, we should build the

shopping website on this server, but developers in our team are not familiar with commands on Linux server. So this server is set as our PHP test server and our team will finish the project on our own local server.

2. HTTPS and Email Confirmation: Because we dicided to build project on our local server as the demo, HTTPS is not necessary for our project. And the functionality of email confirmation is not suitable for our MVP design and demo play. For those reasons, we delete those two functions in our MVP demo.

3. Two search functionalities: In our original MVC design, we can add two different search functionalities. First one is general search box, user can search the product by inserting in the name of product. Second one is a bolck to lead users screen the best-match product by some characteristics of products.

4. Using PHP to create table: Because we abondon the sale record table, and use multiple individual tables to replace the functionality. We have to create a table after every purchase in PHP coding.

Goal of our project:

Our project is creating a shopping website for small family farms and gardeners, and the main products are various seeds. The website can provide the best recommendations about seeds choice and the corresponding planting methods and planning according to customer demand. To begin, We want to divide our page into the main page, buyer purchase page and another seller replenishment page. However, due to technical and time constraints, we only completed the home page (login page registration page) and purchase page.

Feedback received through progress:

As for the suggestions we received in Activity 4, we summarized the following.

First of all, our topic was considered unique and meaningful, like encouraging farming and helping farmers locally. Because this is a field that fewer people will reach. Therefore, when we saw these comments, we strengthened our topic direction and continued our research.

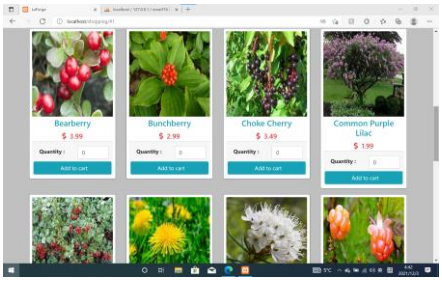
Then about our several files, our advantage is that Our kanban uses colorful views and check boxes to make it look more vivid and concrete. Then our MVP used different releases and explained the details, which was a good way to achieve the desired goal, which were all approved. However, our MVC also commented that the description of View, model and controller was not specific enough. So we will correct these issues in the final Github file upload.

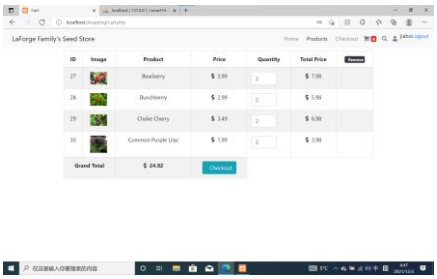
Then, when it comes to our Vlog, although our Vlog is explained in detail, the time is also quite long, and even once the Vlog exceeds the maximum time limit, we should make appropriate clips. In addition, the files shown in the PPT we used in Vlog are not clearly displayed, which makes the audience look a little difficult.So these suggestions gave us good suggestions for making the final presentation video, and we will take them and refine the final Vlog production. Finally, we are very grateful for these constructive comments. These suggestions from our colleagues are very helpful.

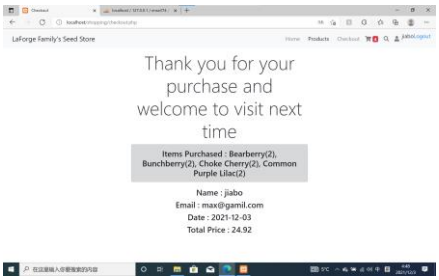
Project Result

Fianl MVC:

According to our final MVP demo. The model for our project have not been changed directly. Our team still keep those two main tables for our database. They are respectively user table (id, username, password, email), seedInfo table (id, seedName, plantCondition, seedIntro, suggestion, price), but we delete saleRecord table (saleID, username, data, seeds, amount, totalPrice). Because we found out that when we use saleRecord table to store the information, users can only purchase one item each time, if users need to buy multiple products, they have to repeat same steps every time. For this reason, we decide create an individual table (id, product_name, product_price, product_image, qty, total_price, product_code) for every sale history. At same time, our team create one more table for seedInfo (id, product_name, product_image, product_price, product_code), because the front-end developer think this table could be very helpful to design the webpages layout. Secondly, we also did some change on the view of website. In final MVP, we keep the general register and login pages, but we delete one of search functionalities block and make the main page like the list of our products. We also changed the purchase page and cancel the user page plan. We used a cart functionality and cart page to replace the puchase page, and add one more receipt page after puchase is done to verify database can store the sale record. All in all, we did not change the controller too much, the biggest change is about purchase coding like I said before. We will create an individual table for each sale.







Reflection and Lessons from Jiabo Zhang:

Regarding the final presentation, our plan is to let zhimu li be responsible for explaining the background of our group's project and why we chose to build a seed sales website as our group's project. Then he went on to explain the responsibilities of each person in our team in this project and the kanban of our project. Then Xufeng Liu is responsible for introducing the RACI and MVP and MVC and Team Reflection of our group project. Finally, I am responsible for introducing to the operation and functions of our website. The three people in our group, zhimu li and xuefen liu, planned to talk for three minutes, and my planned talk time was 2 minutes, but in the final demonstration, we found that zhimu li and xuefen liu were responsible for part of the talk time for more than three minutes, and I didn't explain all the functions and the operation of the team website clearly within two minutes in the planned period, so everyone felt a little hasty. So the reflection of our team in the final presentation is that we should be more precise in time control. The solution we think of is to rehearse several times in advance before the final presentation, so that we will have a clearer understanding of the time of each

part of the presentation. Regarding how the team/individual overcomes obstacles and setbacks, I would like to talk about the mode of operation adopted by our team in the project. Because the members of our group are in different countries, our time zone is also different. So I found that we are different from other groups, it is difficult to get feedback in time for communication and discussion in our group. So our team finally adopted the operation mode of responsibility assignment and regular communication; that is, on the first day of each Project activity, our team discusses how we will complete this activity through zoom, and then distributes the tasks to the team members so that each member assumes responsibility for the part of their responsibility; then if each member encounters any difficulties in the part they are responsible for, they will organize it and wait until five days before the end of the activity. The group will hold a zoom meeting to let everyone work together to help solve these problems and difficulties, and then we will shoot our group's Vlog, and then I'm responsible for editing the Vlog. Finally we will organize all tasks together and upload this Project activity.

Reflection and Lessons from Xufeng Liu:

As for this project, we think it is very valuable, and we have successfully completed most of the requirements, because we have these things to show everyone at the end.

What we are most proud of in the whole project is the ability to come up with a website to show its features, because it visualizes our original concept, and makes these modules perform their respective functions.

One of the difficulties encountered during the project was the need to complete a series of UML-ish diagrams in Activity4, a name that was no doubt unfamiliar at first because it had

never been used before. In particular, the class diagram was a bit complicated to implement because we hadn't completed the corresponding code at that time. Fortunately, after referring to some diagrams uploaded by other students on Github, I was inspired to make a relatively simple class diagram.

What we find most helpful and learning is using various charts and documents, such as RACI Models, MVC diagrams, MVPS, etc. Since we have never been exposed to such specific ways to plan each step of a project before, so we can also use this method in future learning.

Reflection and Lessons from Zhimu Li:

In my opinion, our team did well in the final demo, but I am not satified with our presentation. We should spend more time on preparing it. Before activity #1, even we created a chat group for team, but it was hard to have a meeting because members are in different time zones. So we did not have much time to discuss the theme of project and other details. At the beginning, we had two options, they are respectively application or webpage. Because all of us had CS215 before and had experience of building web, we decided to do the shopping webpage. After activity #1, we all agreed to meet at evening once or twice a week. During the activity #2 and #3, our team had some small conflict about responsiblity and roles table, because no one want to be responsible with controller part and we have some different ideas about couple of diagrams. However, after a long meeting and explanation, all members accepted their roles and understood the documents deeply. All in all, we did a good demo and fine presentation. As developer of a team, I summed up three methods can help team work better.

1. Time management skill for all members.

2. Take responsibility initiatively.

3. Detailed explanation add more time equals to solution.