BINUS University

Academic Career: *Undergraduate / ~~Master~~ / ~~Doctoral~~ *)*	Class Program: *~~International~~ / ~~Regular~~ / ~~Smart Program~~ /* *Global Class / ~~BINUS Online Learning~~ *)*
☐ Mid Exam ☐ Compact Term Exam ☑ Final Exam ☐ Other Exam: _____	Term: Odd / ~~Even~~ / ~~Compact~~ *) Period (Only for BOL): ~~1~~ / ~~2~~ *)
☑ Kemanggisan ☐ Senayan ☐ Semarang ☑ Alam Sutera ☐ Bandung ☑ Bekasi ☐ Malang	Academic Year: 2022 / 2023

Exam Type*	:	~~Onsite~~ / Online	Faculty / Dept.	:	School of Computer Science
Day / Date**	:	Thursday / February 9th, 2023	Code - Course	:	COMP6681001 – Web Programming
Time**	:	13:00	Code - Lecturer	:	Team Teaching
Exam Specification***	:	☐ Open Book ☐ Open Notes ☐ Close Book ☐ Submit Project ☐ Open E-Book ☐ Oral Test	BULC (Only for BOL) : - Class : Global Class: LA02, LB02		
Equipment***	:	☐ Exam Booklet ☐ Laptop ☐ Drawing Paper – A3 ☐ Calculator ☐ Tablet ☐ Drawing Paper – A2 ☐ Dictionary ☐ Smartphone ☐ Notes	Student ID *** : Name *** : Signature *** :		

*) *Strikethrough the unnecessary items*   **) *For Online Exam, this is the due date*   ***) *Only for Onsite Exam*

Please insert the test paper into the exam booklet and submit both papers after the test.

The penalty for CHEATING is DROP OUT!

Learning Outcomes:

LO3: Identify a proper web programming technic to build a web-based application
LO4: Create web-based applications using PHP Framework to solve problems that occur in the IT field.

I. Case (100%)

There's a web application called "Amazing E-Grocery", which is an application that provides limited items (only one in stock) that can be purchased by online service. The index page of the web application is shown below:

Verified by, *Reinert Yosua Rumagit, S.Kom., M.T.I. (D6191) and sent to Program on Jan 10, 2023*

Figure 1. Index Page

"Amazing E-Grocery" web application can only be accessed by the user that has already registered & do the login process; hence every user needs to register first. Below are the application's "Register" and "Login" page.

Figure 2. "Register" Page

Figure 3. "Log In" Page

When the user is already done the registration process and logged in, the "Home" page will be shown:

Figure 4. "Home" Page
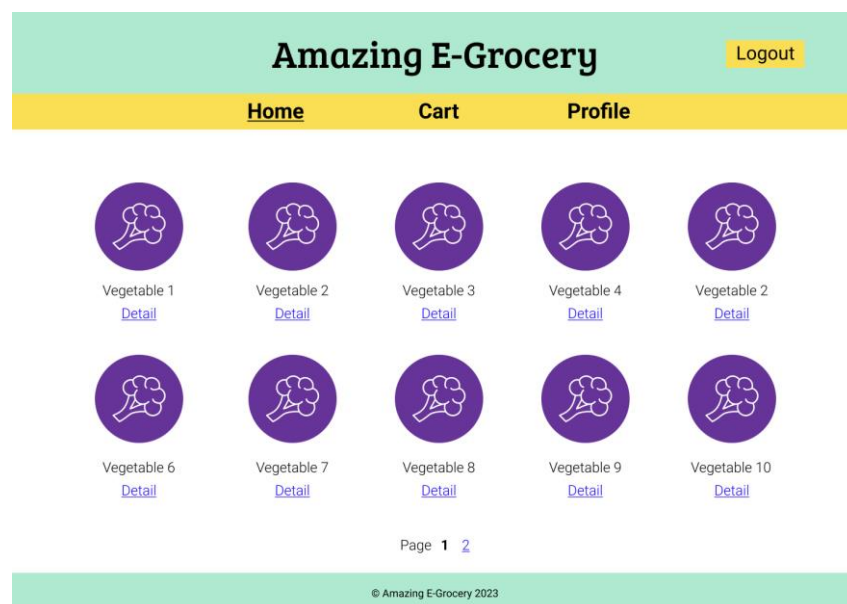
The "Home" screen will show a maximum of 10 grocery items. If there are more than 10 available items, then the "Home" screen will show the remaining items on the next page (page 2 and so on). The example of "Home – Page 2" can be seen on the below picture:

Figure 5. "Home – Page 2" Screen

In the "Amazing E-Grocery" web application, there will be a difference in the "User" and "Admin" navigation. The difference is the "Account Maintenance" menu, which only can be accessed by the "Admin". Other than that, "Home", "Cart", and "Profile" menu can be accessed by the "User" and the "Admin".

Figure 6. "User" Navigation

Figure 7. "Admin" Navigation

The "User" and "Admin" can buy one or more E-Grocery by clicking the E-Grocery title on "Home" page and "Buy" button. The chosen E-Grocery will be shown on "Cart" page as shown on the below figure:
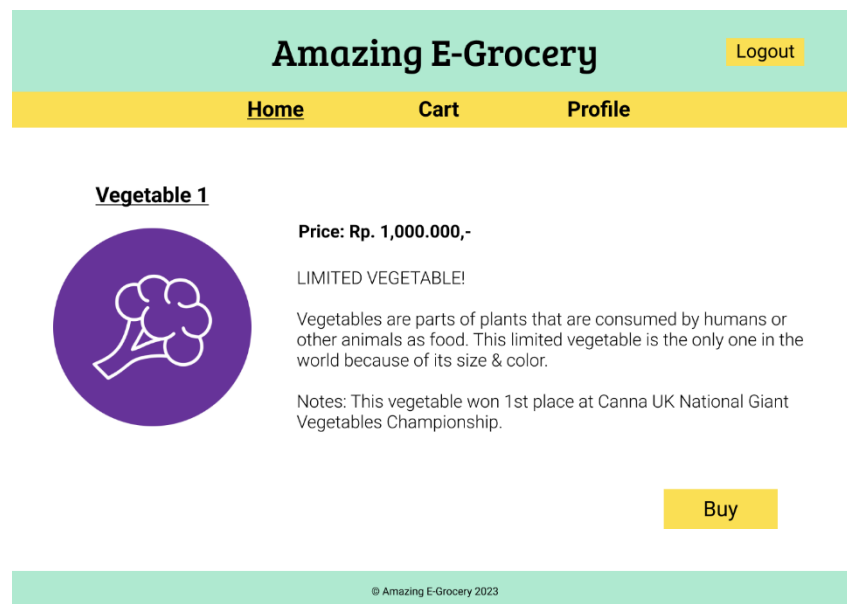
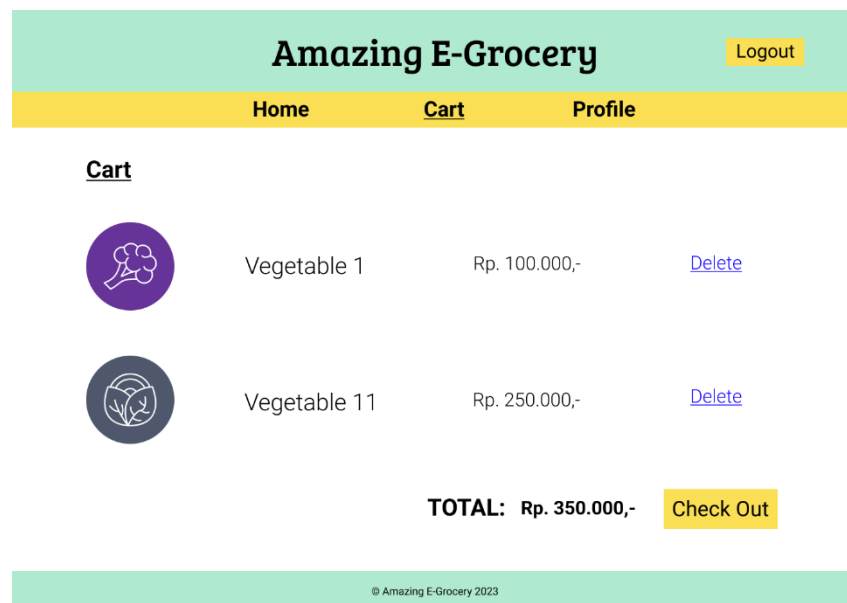Figure 8. "E-Grocery Item Detail" Page to View the Item's Price and Description

Figure 9. "Cart" Page

On the "Cart" page, the E-Grocery list can be deleted by clicking the "Delete" button. For example, here, the "Vegetable 1" is deleted & the "Cart" page will only show the "Vegetable 11":
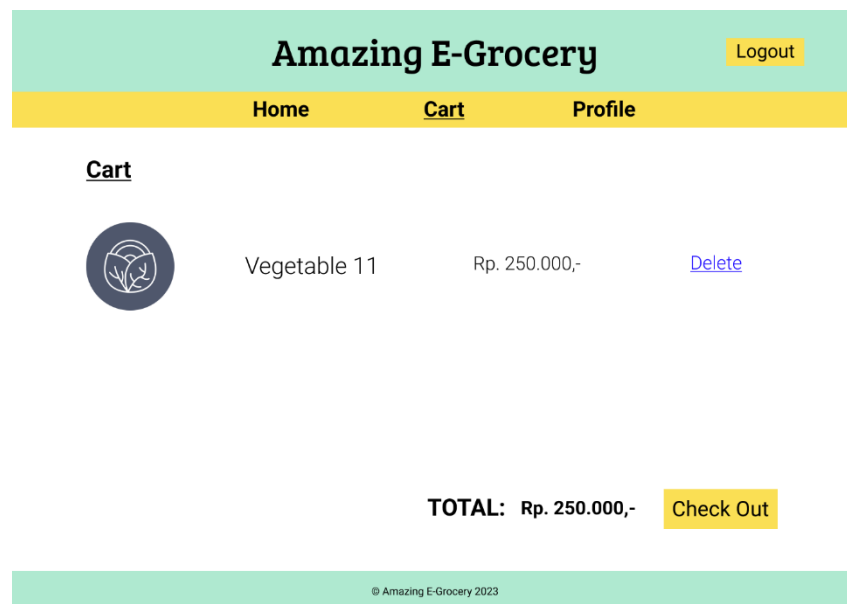
Figure 10. "Cart" Page – After "Vegetable 1" is Deleted

When the list is finalized, the order can be made by clicking the "Check Out" button. If it succeeds, then the "Success" page will be shown (below figure):

Figure 11. "Success" Page

Other than the *E-Grocery* shopping feature, the "User" and "Admin" can change their personal data on the "Profile" menu. If it succeeds, the "Saved" page will be shown:
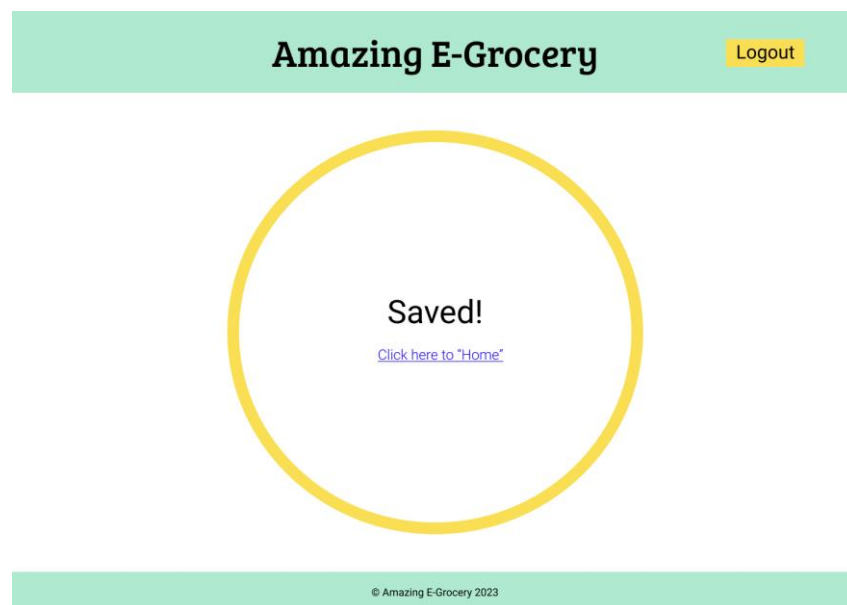
Figure 12. "Profile" Page

Figure 13. "Saved" Page

Specifically, for the "Admin", the "Account Maintenance" menu can be accessed to change the account's role by clicking the "Update Role" link & delete the "Amazing E-Grocery" application's account by clicking the "Delete" link:

Figure 14. "Account Maintenance" Page

Figure 15. "Update Role" Page

If the role is successfully changed, then the new role will be shown immediately like the below figure:

Figure 16. "Account Maintenance" Page when "First L."'s role is successfully changed

And if the one of the accounts is successfully deleted, then the account will not be shown any more like below figure:

Figure 17. "Account Maintenance" page when "Account 7" is successfully deleted

Finally, if the "User" or "Admin" is logged out from the application, the "Log Out Success" will be shown. After logging out, the user's session will be deleted automatically & the application will be redirected to the Index page. **The "User" and the "Admin" must log in again if they want to access the web application.**

Figure 188. "Log Out Success" Page
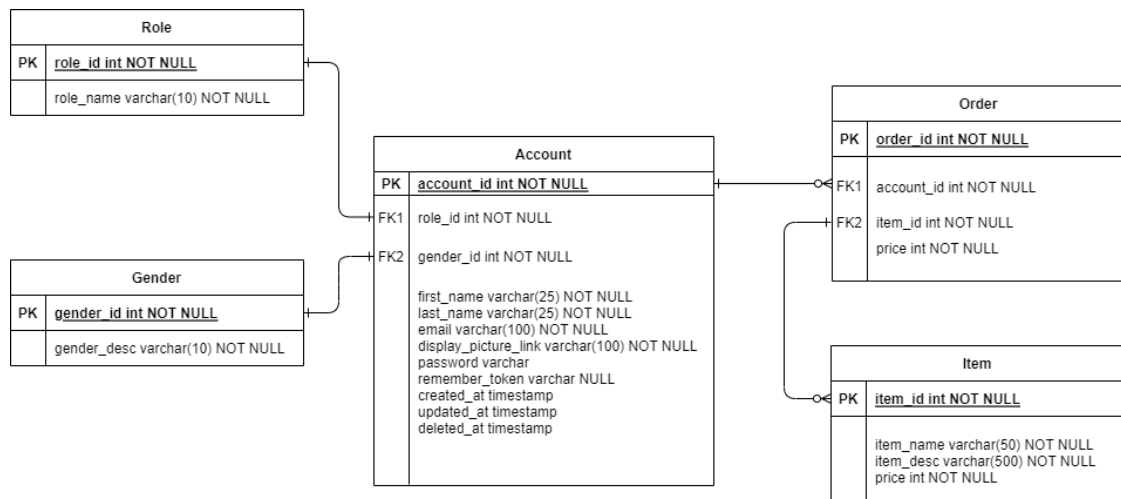
Below is the database design/table structure:

Figure 199. Database Design

Your Assignment:

Create the "Amazing E-Grocery" web application using Laravel and phpMyAdmin with the requirements below. For the E-Grocery list, the list that has been made from Mid Term Exam/Projects can be used:

1. **[LO3, LO4. 20 Points]** Create the below menu in the form format:
    a. **Registration form on the "Register" page with below validations**:
        i. *First Name* à mandatory, no symbol, the maximum character is 25 characters.
        ii. *Last Name* à mandatory, no symbol, the maximum character is 25 characters.
        iii. *Email* à mandatory, should be valid (include "@" and "." Symbol).
        iv. *Role à* mandatory and should be chosen from "User" or "Admin".
        v. *Gender* à mandatory
        vi. *Display Picture* à mandatory, only for image files, and can't be inputted by other media files such as music or video.
        vii. *Password* à mandatory, minimum 8 characters, include minimum 1 number.
        viii. *Confirm Password* à mandatory, minimum 8 characters, include minimum 1 number, should be the same value as the "Password" field
    b. **Login form on the "Login" page with below validations**:
        i. The "Email" and "Password" should have been registered & saved on the database
        ii. If the "User" input the wrong email/password, the "Wrong Email/Password. Please Check Again" error notification should be shown
    c. **"Profile" menu** for the "User" and "Admin" to change their personal data:
        i. The saved value should be shown first when the "User" or "Admin" access the "Profile" menu
        ii. All fields are mandatory to be filled in, including the "Password" and "Confirm Password" field
        iii. The validation is the same as the validation on "Sign Up" page
2. **[LO3, LO4, 30 Points]** Create the **"Home" page and "Cart" menu for the "User" and "Admin"** when they can view the E-Grocery description and add, update, and delete the wanted E-Grocery list for shopping process and the **"Account Authentication" menu**.

3. **[LO3, LO4, 10 Points]** Create the **authentication and *session*** when the "User" or "Admin" logged in and using the web application. The session should also be deleted when the "User" or "Admin" is already logged out.
4. **[LO3, LO4, 15 Points]** Create **"Change Role"** page for the "Admin" with below requirements:
   a. The page can only be accessed by the user with "Admin" role.
   b. The admin should choose the account from the registered account list.
5. **[LO3, LO4, 10 Points]** Create Localization the **dictionary for Indonesian (ID) and English (EN) and should be implemented on the view/blade.**
6. **[LO3, LO4, 15 Points]** Create the **middleware** with the below requirements:
   a. The unregistered user can't access the "User" or "Admin" page.
      If there's an unregistered user who tried to access the "User" or "Admin" page through URL, the application will *redirect* **the unregistered user to the "Index" page**.
   b. The user with "User" role can't access the "Admin" page and "Account Maintenance" menu.
      If there's a "User" tried to access the "Admin" page or "Account Maintenance" menu through URL, then the application will *redirect* **the user to the "Home" page.**

Notes:

You could enhance the app development (such as color, font, image, layout, etc.) by following the requirements. Upload your project on any cloud storage (**KEEP IT UNLOCK**). Make a **demo video (Max 10 minutes)** to show all page results and upload it on cloud storage. Put your link video on the answer-sheet along with your project link. ***An application that runs improperly can affect scoring***.

Also, please write the contactable id/phone number to help the lecturer with any difficulties on the scoring process (can be an Email, Line ID, WhatsApp number, etc.).

-- Good Luck --

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