Lab 2: Building a Grocery Store Management System with PHP

Lab Overview:

In this lab, you will create a Grocery Store Management System using PHP, emphasizing the practical application of arrays and functions. The system will manage grocery items, including details such as item name, item type, item price, and item expiry date. Through hands-on exercises, you will implement functionalities for adding new items, displaying the inventory, and checking the expiry status of items.

Learning Objectives:

- Apply the concepts of arrays to organize and manage grocery item details.
- Implement functions to perform essential operations within the Grocery Store Management System.
- Understand the practical integration of arrays and functions for efficient web application development.

Lab Tasks:

Task 1: Setting Up Grocery Item Arrays

- Create an indexed array to store grocery item names.
- Develop an associative array to store additional details for each item, including type, price, and expiry date.

Task 2: Displaying the Grocery Inventory

- Implement a function to display the entire inventory of grocery items, including all details.
- Use HTML to create a user-friendly web page that showcases the grocery inventory.

Task 3: Adding New Items

- Create a function to add new grocery items to the inventory.
- Allow users to input item details, including name, type, price, and expiry date.

Task 4: Expiry Date Check

- Develop a function to check the expiry status of each item in the inventory.
- Display a notification on the web page indicating whether an item is expired or still within the validity period.

Submission Guidelines:

- Submit the PHP scripts and HTML files for each task.
- Include a README file explaining the logic behind your implementation, any assumptions made, and challenges faced.
- Optionally, provide additional functionalities or enhancements beyond the specified tasks for an extra challenge.

Evaluation Criteria:

- ✔ Array Implementation:
  - Correct creation and utilization of arrays for grocery item details.
  - Proper organization of data within arrays.
- ✔ Functionality:
  - Successful implementation of functions for displaying the inventory, adding new items, and checking expiry status.
  - User-friendly interactions and accurate expiry date checks.
- ✔ Integration of Arrays and Functions:
  - Demonstrated synergy between arrays and functions within the Grocery Store Management System.
  - Effective use of functions to manage and process array data.
- ✔ Practical Application:
  - Successful creation of a functional Grocery Store Management System.
  - Proper handling of user interactions, data processing, and expiry status checks.
- ✔ Code Quality:
  - Well-organized and readable code.
  - Appropriate usage of comments to explain the code logic.
- ✔ Problem Solving:
  - Addressing any challenges faced during the lab.

Additional Notes:

- Collaboration among students is allowed, but each student should submit their individual work.
- Ensure code is free from syntax errors and runs without issues.
- Late submissions may incur penalties, so manage your time effectively.