# PERTANDINGAN WORLDSKILLS MALAYSIA KATEGORI BELIA (WSMB) TAHUN 2025

# (WEB TECHNOLOGIES)

# SOALAN PRAKTIKAL

# PERINGKAT PRA-KELAYAKAN

# MASA : 3 JAM

**NAMA: _____**

**No. KP: _____**

**JABATAN PEMBANGUNAN KEMAHIRAN**
**KEMENTERIAN SUMBER MANUSIA**

# INTRODUCTION

A seller of used-cars in Malaysia called “AZ Auto Enterprise” has asked for the development of a web application to simulate and manage the sale of cars in their new store. Your job is to develop a web application to demonstrate the organization and operation of the used-car dealership, with the following features:

- Arrival of customers who must wait in the queue to be served.
- Allocation of customers in one of the cars they are interested in: (Porsche, Volkswagen, Audi or BMW)
- Access to the cashier for the customer to checkout/purchase a car.
- Access to the exit area for customers to leave the store.
- Aggregation of the online store statistics

The customer has provided some initial files that were developed previously in Media Files folder.

# DESCRIPTION OF PROJECT AND TASK

The application should present the following areas:

- **Queue of Customers**
  Customers arrive at the store are presented in a queue and can only be seen in order of arrival.

  The Queue of customers can receive a maximum of 10 customers at any one time. When one customer is moved to a car, one new customer can enter in the queue.

  You can only attend to the first customer within the queue and allocate them to one of the cars available in the hall, according to their brand they are interested in.

  If the customer requests a car that is sold out, this customer can then visit any available brand of car.

- **Cars for sale**
  Show cars that are for sale in the store. The cars are grouped by brand on the sales floor:
  - Porsche with 4 cars.
  - Volkswagen with 6 cars.
  - Audi with 5 cars.
  - BMW with 3 cars.

- **Cashier**
  A location where the customers decide if they would like to buy the visited car or not.

- **Exit**
  Area where the customers can leave the store immediately.

- **Statistic Display**
  Displays the number of customers served, the number of cars sold and the amount collected from the total sale of cars.

**The application rules:**

- Customers will appear in the queue of customers to be served. This feature is developed in the media provided by the owner.

- The first customer in line should be moved to a car according to their preference (Porsche, Volkswagen, Audi or BMW). Only the first customer in line can be moved, the others must wait their turn for service.

- The customer that is being moved can only occupy a car that matches the brand they are interested in. If the customer is dropped in other place, they should return to the top of the queue. A car that is being used by a customer cannot be used by another until the original customer is moved to the cashier or to exit, thus freeing the position.

- If the brand requested by the customer is sold out, this customer can visit and buy any another brand of car available within the store.

- After moving the first customer, the next customer in line should take the first position in the queue and thus become available to be served.

- Customers can be moved to the exit area from anywhere (directly from the first place within the queue or from a visited car). Customers dropped in the exit area need to be removed from the application without any other interaction. The statistics should not be updated.

- Any customer who is in a car can be moved to the cashier area, at this timea message should be displayed, to the user of the application with the following question:
  - Would you like to purchase the car?
  - The response options should be "YES" or "NO".

- If the user answers the question with "NO", the customer must be removed from the application and the removal must be presented through an animation. After removing the customer, the aggregation in the number of customers served will be increased in the application.

- If the user answers the question with "YES", the customer should be removed from the application. Removal of the customer should be presented in animated form on the screen.The car purchased needs to presented with a “SOLD” in front or above. The car sold cannot be visited any more by any customer. After removal of the customer, the aggregation display of the application is updated, increasing the number of customers served, the number of cars sold and the amount collected from the sale according to the price list below:

    - Porsche: RM650,000.00
    - Volkswagen: RM180,000.00
    - Audi: RM300,000.00
    - BMW: RM250,000.00

- A customer as that in a car can only be moved to another available car of the same brand required, to the cashier, or to the exit areas. The customer should return to the original point if dropped in any other area of the application.

- Your application should be cross-browser compatible between Firefox and Internet Explorer.

Use comments in your JavaScript code developed to clarify the operations performed by blocks of commands used.

# INSTRUCTIONS TO THE COMPETITOR

Save the files of your application in directory on your desktop computer **"Auto_CompetitorID"**, where **CompetitorID** is the ID assigned to you during the competition day.

**ATTENTION**: You are encouraged to use the functions of open source libraries or frameworks provided to solve the proposed requirements. The application will be evaluated using Chrome and Firefox.

# MATERIALS PROVIDED

| ITEM | DESCRIPTION |
|---|---|
| jQuery | JavaScript library |
| WebApplication | HTML, CSS and images. |

# MARKING SCHEME SUMMARY

| SECTION | CRITERION | JUDGEMENT MARKS | MEASUREMENT MARKS | TOTAL |
|---|---|---|---|---|
| P1 | Clientside implementation of open source libraries and frameworks | 0.0 | 32.0 | 32.0 |
| P2 | Usability and accessibility | 6.0 | 12.0 | 18.0 |
| **Total** | | **6.0** | **44.0** | **50.00** |