University of Makati

College of Computing and Information Sciences

ELEC 5 - Group Activity

Scenario: [INTELLITECH] Motor Vehicle Registration Schedule (Traffic Monitoring Application)

A local government unit are currently in a process of developing a traffic management system to help them in maintaining the traffic in their city especially during peak seasons. As part of the developing team that they hired, your team were ask to proposed a feature that simplify the vehicle registration schedule. They want the feature to be simple and easy to use with minimal variable inputs from the vehicle owner such as vehicle type, plate number, smoke emission test certificate/number, and third party liability insurance certificate/number. The output should be simple as follows "Your motor vehicle with Plate No. ____is QUALIFIED for RENEWAL on < SPECIFY THE MONTH & YEAR> until <SPECIFY THE WEEK OF THAT MONTH>." Other details are as follows:

Table 1: Example 1 Variable Inputs with Sample Data

| VARIABLE INPUT | SAMPLE INPUT | | |
|----------------------------------|---|--|--|
| Vehicle Type | Honda CRV | | |
| Plate Number | DKM 1377 | | |
| SET Certificate/Number | SET No. 00-123-456 | | |
| TPL Insurance Certificate/Number | TPL No. 23-001-2345-67890 | | |
| OUTPUT RESULT | Motor Vehicle Honda CRV with Plate No. DKM 1377 is qualified for renewal on JULY 2024 until the 3 rd week of JULY 2024 only. | | |

Table 2: Plate End Registration Schedule Matrix

| PLATE ENDING | SCHEDULE MONTH |
|--|---------------------|
| 1 | January |
| 2 | February |
| 3 | March |
| 4 | April |
| 5 | May |
| 6 | June |
| 7 | July |
| 8 | August |
| 9 | September |
| 0 | October |
| Any Plate end with corresponding penalty | November - December |

Table 3: Plate Digit (2nd to the last digit) Registration Week Schedule

| 2 ND TO THE LAST DIGIT | SCHEDULE WEEK |
|-----------------------------------|----------------------|
| 1-3 | 1 st week |
| 4 – 6 | 2 nd week |
| 7 – 8 | 3 rd week |
| 9 - 0 | 4 th week |
| | |

Rubrics (50 Total points)

| Criteria | Mastery (2.5 points) | Meeting (1.5 points) | Does Not Meet (0.5 point) | |
|--|--|--|---|--|
| Scientific Accuracy | Use of multiple variables that demonstrate understanding of environmental factors. | Use of some variables that demonstrate understanding of environmental factors. | Use of variables that fail to demonstrate understanding of environmental factors. | |
| Coding Efficiency | Code is easy to follow and direct. | Code is mostly easy to follow and direct. | Code is convoluted and unnecessarily long. | |
| https://forum.code.org/t/share-your-rubric-for-assessing-computer-models/2927/48 | | | | |

Vehicle Registration Vehicle Type e.g., Honda CRV Plate Number e.g., DKM 1377 SET Certificate/Number e.g., SET No. 00-123-456 TPL Certificate/Number e.g., TPL No. 23-001-2345-67890 Check Registration Schedule

Vehicle Registration

Vehicle Type

Honda CRV

Plate Number

DKM 134

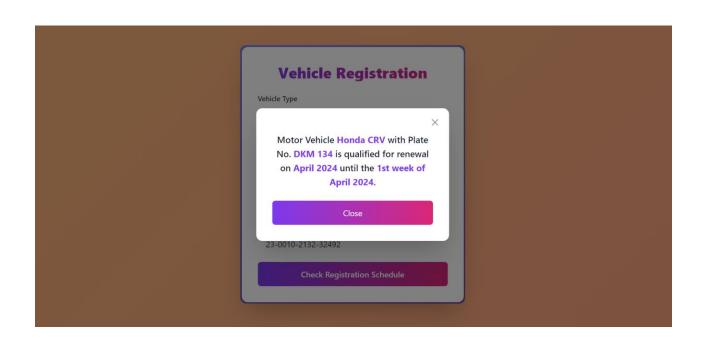
SET Certificate/Number

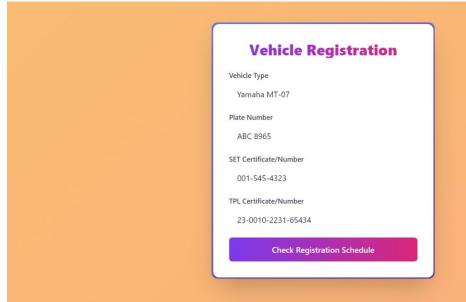
001-315-4212

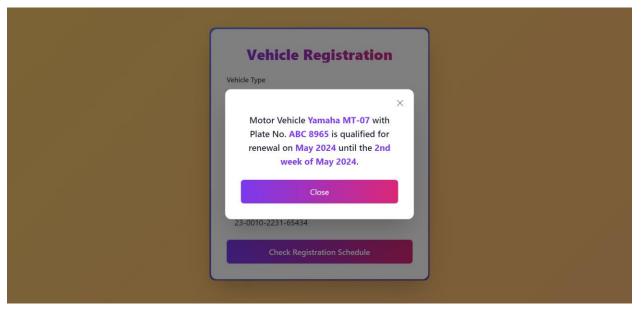
TPL Certificate/Number

23-0010-2132-32492

Check Registration Schedule







ERROR MESSAGE

