

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](#)

Vehicle Registration

Vehicle Type

Motor Vehicle **Honda CRV** with Plate No. **DKM 134** is qualified for renewal on **April 2024** until the **1st week of April 2024**.

Close

23-0010-2132-32492

Check Registration Schedule

Vehicle Registration

Vehicle Type

Yamaha MT-07

Plate Number

ABC 8965

SET Certificate/Number

001-545-4323

TPL Certificate/Number

23-0010-2231-65434

Check Registration Schedule

Vehicle Registration

Vehicle Type

Motor Vehicle **Yamaha MT-07** with Plate No. **ABC 8965** is qualified for renewal on **May 2024** until the **2nd week of May 2024**.

Close

23-0010-2231-65434

Check Registration Schedule

ERROR MESSAGE

Vehicle Registration

Vehicle Type

Honda CRV

Plate Number

asda

SET Certificate/Number

001-315-4212

TPL Certificate/Number

23-0010-2132-32492

Check Registration Schedule

Vehicle Registration

Vehicle Type

Honda CRV

Error: Invalid plate number.

Close

TPL Certificate/Number

23-0010-2132-32492

Check Registration Schedule