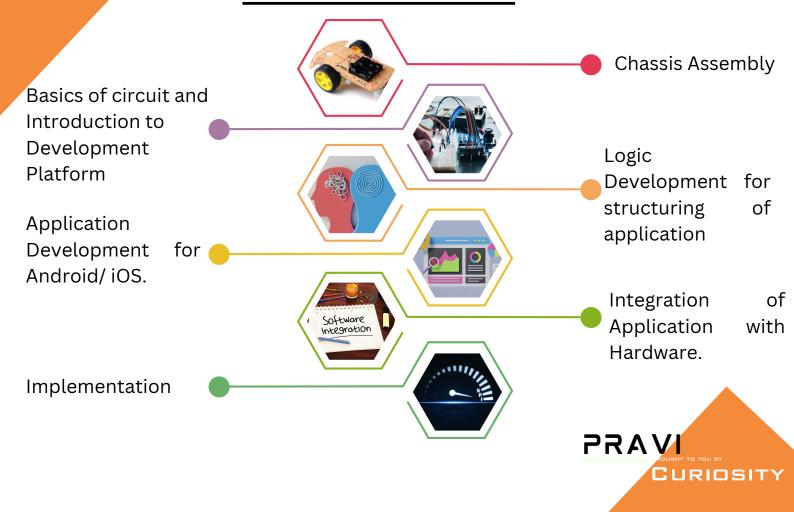




### FLOW CHART OF EKLAVYA WORKSHOP



# ANDROID/IOS APP CONTROLLED GESTURE ROBOT



Our takeaway Eklavya Bot kit is designed to educate your champ with complete knowledge of technology. Not just to get into chakravyu of knowledge but also to come out of it victoriously with wisdom of Innovation

Eklavya Trainer kit includes:

- 1. Robot Chasis.
- 2. Node MCU.
- 3. Motor Driver
- 4. Re-chargable battries
- 5. Buzzer.



#### DETAILED BREAKDOWN OF WORKSHOP

1 hours
Basic
introduction of
chassis parts
and assembly

1 hours
Understanding
and building the
circuit.

2 hours
Getting
comfortable
with code and
playing with
functions.

2 hours
Logic
Development
for structuring
of application

2 hours App Development 2 hours Integrating App with Eklavya Bot.

PRAVI

CURIOSITY

#### DETAILED BREAKDOWN OF WORKSHOP

1.1 Explaining chassis parts1.2 Assembling the parts

2.1 Understanding & Building the circuit

3.1 Taking a look at the code

3.2 Understanding wifi connection

3.3 Understanding the logic of the code

3.4 Taking a look at the functions

4.1 Exploring the features of application

4.2 Designing simple UI

4.3 Making backend logic for it

4.4 Building the app for the bot

PRAVI CURIOSITY

#### APP DEVELOPMENT PLATFORM

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then set | Buttons | Image | 10 | Stort png |

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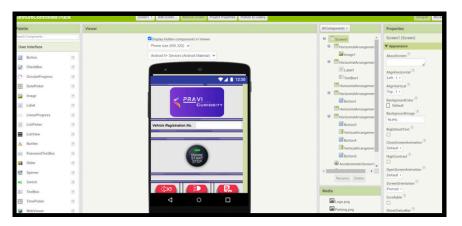
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aAccelerometer Sensors | | XAccel |
```





#### USER INTERFACE IN ANDROID DEVICE



- User Interface is fully customizable according to requirement.
- In the vehicle registration number, enter the IP address of Nodemcu to establish connection between Robot and Mobile Device.
- To start and stop the robot, press the "ENGINE START STOP" button.
- The below three buttons are use for Horn, Headlight and Parking respectively.



## FUNCTIONS CURATED FOR EASY UNDERSTANDING

```
Gesture_Controlled_Robot.ino
        void move_forward() {
  digitalWrite(RMotor_1, LOW);
          digitalWrite(RMotor_2, HIGH);
          digitalWrite(LMotor_1, HIGH);
          digitalWrite(LMotor_2, LOW);
         /* Move Backward */
         void move_backward() {
          digitalWrite(RMotor_1, HIGH);
          digitalWrite(RMotor_2, LOW);
digitalWrite(LMotor_1, LOW);
          digitalWrite(LMotor_2, HIGH);
        void turn_right() {
  digitalWrite(RMotor_1, LOW);
          digitalWrite(RMotor_2, HIGH);
          digitalWrite(LMotor_1, LOW);
          digitalWrite(LMotor_2, HIGH);
        void turn_left() {
          digitalWrite(RMotor_1, HIGH);
          digitalWrite(RMotor_2, LOW);
```

- Code of the bot is written in most understandable and easiest way.
- Functions have been kept small and precise.

