PROJECT TITLE : METROAT

TEAM MEMBERS:

1. MURUGESAN.A
2. SARAN.S
3. RAHUL.A

YEAR: 3RD YEAR

SECTION:D SEC

PAGE2: DESCRIPTION OF THE PROJECT

The NaviLog craft is a portable and compact device which will be a major player in minimizing the destruction of roads in order to detect and restore the water flow in the city. The craft helps us get an insight into the situation underground. The device can be controlled remotely by the person standing on the road. The data collected will be stored in cloud which can be used for future reference. The design of the device is elegant and crisp. It can maneuver easily through the bends and pipes and detect the clogs and leaks in pipe.

COMPONENTS USED:

A BASE STRUCTURE (BOAT)

ARDUINO UNO R3

PIC MICROCONTROLLER, SOIL MOISTURE SENSOR

ESP32CAM MODULE

PRESSURE SENSOR BMP280

TEMPERATURE SENSOR DHT-11

GPS MODULE NEO 6M

WORKING:

Through a manhole the device is lowered into the pipe .

The device then moves towards the defect .

The device sends ultrasonic rays and the data is intrpreted by the controller.

According to the data received the device is handled

Once the clog is detected, with the help of the GPS module at the exact location of the clog, the road is dug and the pie can be fixed.

Now the water flow is restored.