**Algorithm for Delivery Drone Simulator**

This is a drone simulator that delivers Environment Friendly Utensils to Different cafes at Nust, Students from SEECS in partnership with IESE have prepared this Module to work in order to Protect the environment

The algorithm for the drone’s software produced by BESE 16B students,

Hassaan Ali, Hassan Ghazi And Ali Rehan is given below:

1. **Start**
2. **Initialize** Battery = 100, Time = 00:00 and deliveries=0
3. **Display a welcome message**
4. **Ask the user to input the current time**
5. **Repeat the following steps for each delivery** (Ask the user to **enter the delivery location** (C1, C2, or C3).  
   b. **Generate random weather conditions** sunny, windy, or rainy.  
   c. **Check for any obstacles** in the route.
6. **Handle weather conditions:**

If the weather is **windy** and the battery is **below 40%**,  
→ Display a message: *“Battery low. Recharging…”*  
→ Add 1 hour of recharge time and restore battery to 100.

If the weather is **rainy**,  
→ Display *“Rainy weather detected. Waiting for clear skies…”*  
→ Add 1 hour to the time, then recheck weather conditions.

1. **If an obstacle is detected**

Display *“Obstacle detected. Rerouting”*

Subtract 10% from the battery and add 5 minutes to time

1. **Finish the delivery** according to the selected location:

For **C1:** Subtract 10% battery and add 15 minutes.

For **C2:** Subtract 20% battery and add 25 minutes.

For **C3:** Subtract 25% battery and add 45 minutes.

1. **Display delivery results:**

Print *“Delivery Successful!”*

Show current battery percentage and current time.

End the loop.

1. **After all deliveries or when operations stop:**

Display *“Thanks for using the system. See you tomorrow”*

1. **Stop**