Title:- VTOL of an rc plane through thrust vectoring

Implementation:

Week 1

Ordering of the components. Design of the rc plane .discussion on how to properly implement thrust vectoring (we have already made an rc plane before).

Week 2

Start building the wing and the fuselage of the plane.

Week3

Finish building the plane. And figure out how to adjust the IMU according to our aircraft. How to change the direction of the propellers smoothly in accordance with the IMU.

Week 4 and Week 5

Test flight and repeatedly improve the calibration for proper VTOL.

Components used and cost:

- Turnigy AE-80A Brushless ESC x2
- 2 x Turnigy 2213 20turn 1050kv 19A Outrunner
- 4S(15v) lipo battery
- HXT900 9g / 1.6kg / .12sec Micro Servo x4
- Nylon XT60 and XT90 Connectors
- Styrofoam, bluecore foam,thermocol.
- Bondtite
- IMU

Learning :

Understanding the aerodynamics of thrust vectored RC plane and coding of IMU circuit.