PROJECT NAME : Mobile controlled RC Plane.

PROJECT DESCRIPTION :

We want to make an RC plane which can be controlled using an android mobile. In the first stage of the project, we would make the plane using the normal transmitter and receiver circuits but we will give the input to the remote using an android phone, and an Arduino BT module using the buddy port on the remote control. In the second stage, we would try to remove the need of the transmitter and receiver circuits by putting the Arduino module directly on the plane and making the necessary connections. In the final stage, we would try to put a camera in the plane and send the video feed or images back to the phone and show it in the app.

IMPLEMENTATION STEPS :

1st week : Talk to seniors and mentor, decide plan of action and the required materials and complete the construction of basic RC plane.
2nd week : Buy the materials required and start making the android application and the work on the Arduino code.
3rd week : Test using normal remote and complete work on the android application and Arduino code. Learn flying the plane using a phone and start trying to eliminate the necessity of a remote (by putting the Arduino directly on the plane).
4th week : Complete the experiments without the remote and do trial runs.
5th week : Install a camera in the plane and modify the Arduino and android code.
6th week : Complete the pending work (if any).

COMPONENTS REQUIRED AND ESTIMATED COSTS :

1) Arduino BT board – approx. Rs. 2000
2) RC plane kit – approx, Rs. 4000
3) RC plane remote – approx. Rs. 2000 (Expected to be provided by the mentor).
4) A camera.

LEARNING EXPECTATIONS :

We expect to learn the functioning of an RC plane, coding for android applications and also Arduino coding.