MILESTONE 0: HOME-MADE DRONE

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Our team project consists of the design, construction and presentation of a drone. As well as a remote control to control the UAV (Unmanned Aerial Vehicle) via wifi/bluetooth. Looking at the motivations at the group level, we believe that drone building can be a valuable skill for today's market and an opportunity to learn and understand how drones work.

We have grouped the objectives of the project into three areas:

1. Create a drone in an economical and accessible way for the community.
2. Understand the operation at the level of design, software, and hardware.
3. Improve the technical and team collaboration skills of the group.

Regarding the organization and the separation of responsibilities of the group, the structure is as follows:

- Project manager: Jana Bover
- Mechanical leader: Eloi Garcia
- Electronics leader: Ferran Huéscar
- Software leader: Jordi Rovira

However, we will all get involved in all areas for a better rapport and understanding of the final result.

On the other hand, after digressing and doing a little search on the internet we have initially decided on the following tasks:

1. Research and gather information about the necessary components and how to build a drone.
2. Structure a team to work on different tasks, such as component selection, software development, or UAV design.
3. Prepare a list to buy the necessary components for the manufacture of the drone.
4. Build a prototype and run tests to improve the design and performance of the drone.
5. Evaluate the results and make necessary adjustments.
6. Complete construction of the drone and conduct flight tests.
7. Present and analyze the results of the project.

In addition to the tasks proposed above, we will have to reflect and monitor the project with the GitHub tool. A platform for version control and collaboration on software projects. In this way, it will be important to transfer the day-to-day tasks, as well as the partial results of the project. In other words, we will be able to organize the work of all the members of the group, for better monitoring and progress of the project. On the other hand, it will also be easier to manage feedback from tutors.

Finally, once the project is finished, it will have to be captured on a web page called "instrucables.com". This resource allows users to share and discover DIY projects (do it yourself). The platform hosts a wide variety of projects in categories like electronics, gardening, crafts, and more. Each project includes detailed step-by-step instructions, images, and materials needed to complete the project. Additionally, users can comment, ask, and share feedback on projects.

For our part, we are also going to include a promotional video of maximum two minutes. Our initial idea is to explain the general operation of the drone, show the final design, either through 3D renders or with the prototype already built, and film the drone's flight.

In short, this project is an exciting opportunity to learn and develop valuable skills. We are excited to work together on this project and see what results we get.