



Drone Project



Studio - 5 Seymour Reeves-Boddy

- 1 Drones Cost a lot of Money
- 2 Operating Costs are increadibly high
- 3 Dificult to use and training is required

Problem



1 Cheap and easily replaceable platform

2 DIY and fixable by user

3 Minimal knowledge required

Solution

Plan

My main goal for this Studio 5 project is to create a drone that is both cheap and easy to use, for the end user.

Drones play a big part in surveying and other tasks and i want them to be easily accessible to farmers and doc for suevrying operations.


Currently,most drone projects are done by large scale operations that use very large and expensive drones to complete the task. They also require a trained operator that adds to this cost.

Once i have a 3d printed Drone that is cabapale of completing tasks. I wil begin to work on devloping a Aplication that will interface with the drone and allow the users to create waypoint missions for the drone to follow then begin to genrate a map of the surveyd area

Research

COMMERCIAL SOLUTIONS > INDUSTRY > SURVEYING > DJI MATRICE 300 RTK PHOTOGRAMMETRY COMBO

GO TO CART



The image shows a DJI Matrice 300 RTK drone with a Zenmuse P1 camera. Below the main image is a smaller image showing the drone's components, including the drone itself, the camera, and various accessories like batteries and a carrying case.

DJI MATRICE 300 RTK PHOTOGRAMMETRY COMBO

Contact for Pricing
SKU: M300RTK_P1

The DJI Matrice 300 RTK with Zenmuse P1 (45MP full-frame sensor) can scan up to 3 km² in a single flight at 3cm GSD. This coverage area makes it a highly efficient surveying tool without the requirements for GCPs.

QUANTITY

[CONTACT FOR PRICING](#)

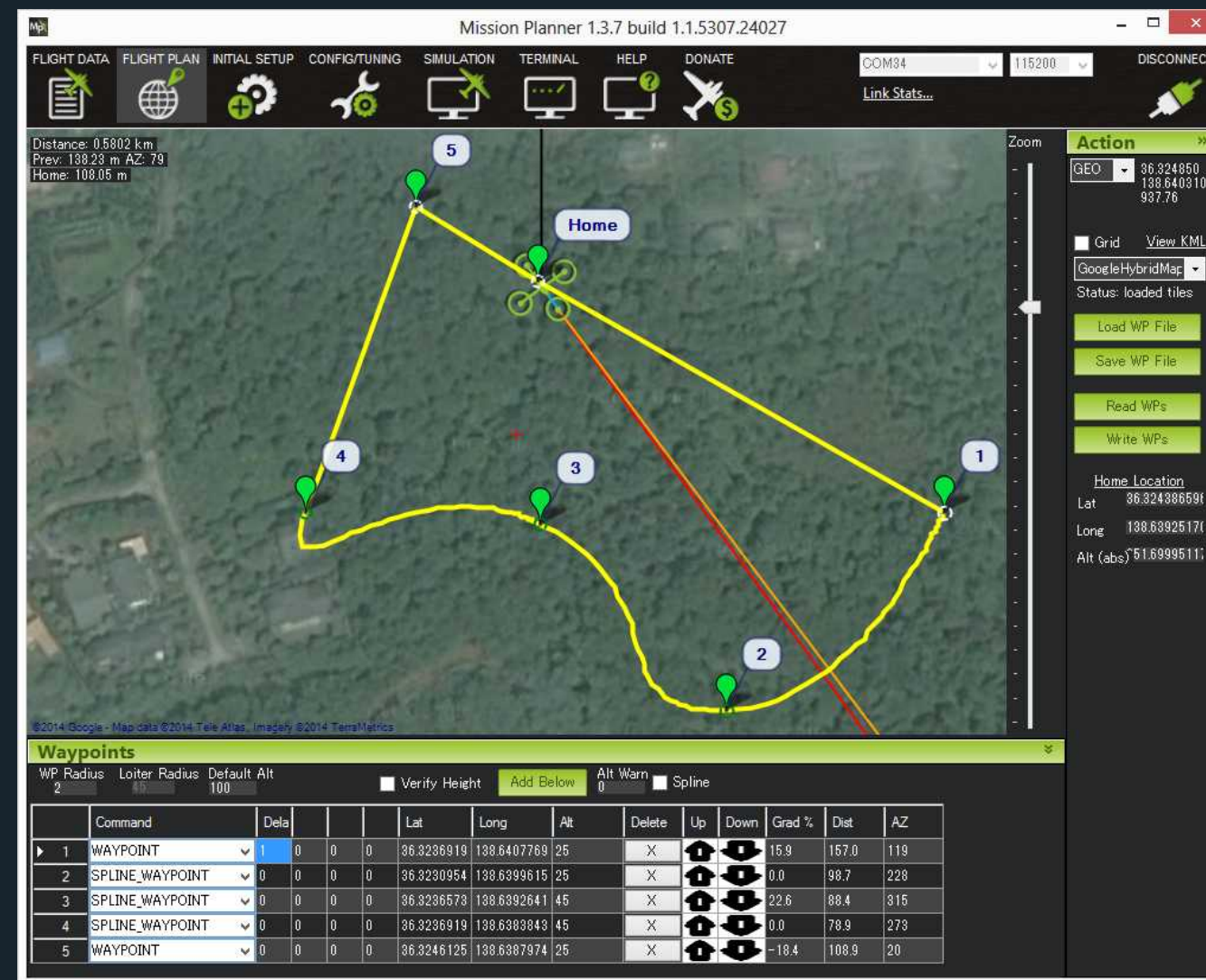
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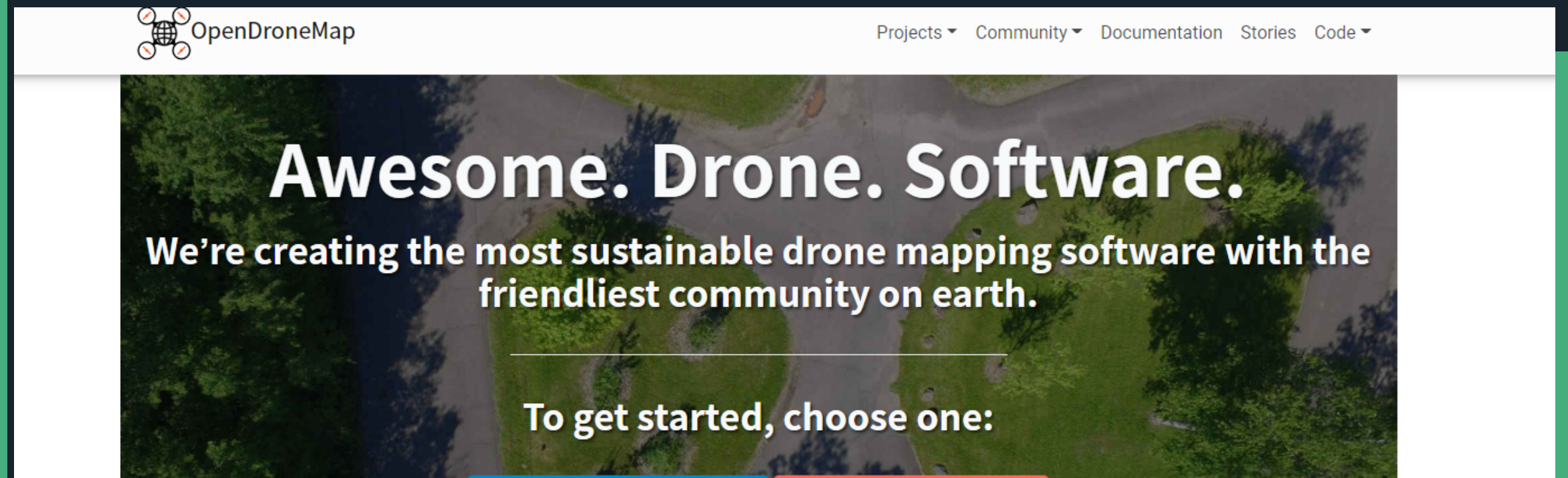
Drones Such as this one are increadibly usefull for surveying but cost upwards of \$40,000 NZD and this inherit cost can be a big hurdle for users and i seek to create omething that might not be as advanced as a \$40,000 drone but still give the user what they need, that be surveying or other required operations.

Applications



Ardu Pilot is the main application that i will be using for testing and creating missions for the drone it is an open source project with extensive documentation on utilizing it to its full potential. and it easily interfaces with GCS (Ground Control Software) that i hope to create

Applications

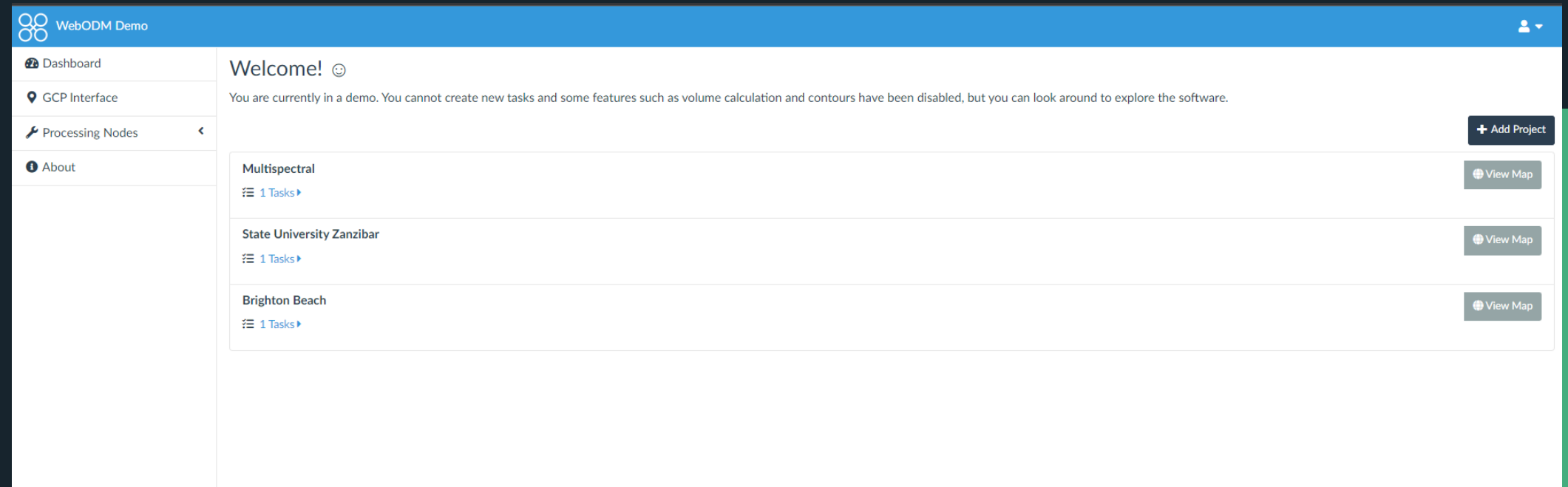


Open Drone Map is another key software that i am using to facilitate my project.

It is also a very trusted open source codabaser that allows for image stiching and creating maps with captured images it will also interface with my aplication allowing the users to easily see the mapped area the drone has been,

I chose this software as it its open source and i can build on an already devloped and tested platform, it is also the most full featured drone mapping solution

Applications



Open Drone Map Also has the WEBODM that can be used to create a web application to my needs for organizing jobs for the images to be processed and get multiple types of data from the images.

