MapOurForest – Designing a Volunteered Geographic Information Systems for Reforestation Associations.

João Godinho (Ireland) and Carolina Rocha (Portugal)

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SUMMARY

Portugal is continuously affected by highly destructive wave of wildfires, endangering ecological systems, habitats and cultures. At the same time, it lacks a robust and sustainable long-term project to address this issue. Small volunteer Non-Governmental Organizations (NGOs) relentlessly work on the ground mobilising local people to re-forest and provide solutions create more resilient green areas, that promote biodiversity, wildfire natural defences.

MapOurForest is a prototype volunteer project, designed by the Young Surveyors Network-Portugal group, aiming to provide a fully oriented and user-friendly solution to help decision makers and works managers on small volunteer NGOs. The inclusion of a dedicated Geographic Information System (GIS) into their workflows shall greatly improve and optimise their efforts, once are a very powerful tool for decision making and strategizing. The integration of GIS in the work routine of reforestation associations allows them to carry out several integration routines, inventory, analysis, planning and management of your resources.

For the execution of this project, we rely on 4 key elements: An experienced board of mentors, a team of young geospatial student volunteers, an open-source development platform and interested clients. This project intends to use GIS technology applied in a free and open-source platform (e.g. QGIS), with a handy interface and containing all relevant data about re-foresting actions. One key part of the process is the professional growth of the geospatial student volunteers. It shall introduce them to a commercial project environment and help consolidate their skills for the future.

The execution starts with the strategic planning, that encompasses a NGO's needs survey, platform selection and user interface design. Following is the analysis and spec requirements phase where the data acquisition starts, the geo database is designed and the first prototype starts being developed.

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Then there's the development phase where the data is processed and inserted in the database, the Web-GIS is created and the first testing and quality control is undertaken. Finally, the system is officially launched, with a continuous support aiming to improve and better orient.

This project will allow, through the sharing of experiences between the NGO and mentors, unique skills to its members, allowing them to achieve a singular efficiency in this area. Having our volunteers on a constant evolution allows the further steps to be taken by themselves in full autonomy. On a later stage this project will also be scaled and made available for a broader market.

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