## On-line teaching for NGOs

Francisco Fernández Reyes

#### 1 Introduction

In today's NGO lives, not only a physical volunteering is needed, but also a volunteer that makes the work in the back office. This work is the building of a website that offers support for the NGOs. The majority of these websites was built many years ago, with the boom of the Internet, and thereby, many of them have been left or became obsolete.

Nonetheless, these organizations have won in virtual presence and at a low cost. Following this idea, we have found many organizations interested in upgrading their webs using new technologies. Most of them would like to have a CMS (Content Management System) intuitive and dynamic, since they can attract or engage possible donors and volunteers. Moreover, a huge number of these NGOs would like to have an application different from the CMS where they could public on-line courses [link].

## 2 Objectives

The objective of this project is to develop a solution for managing virtual online courses, using for this purpose the framework Django. The final idea is to offer the possibility for online courses. That's to say, we want to give the option of uploading files for the courses, keeping a grade system as well as the option of making exams/ tests. It will be also studied the possibility of integrating this application with a CMS (Content Management System) open source. We will leave open the choice of adding geolocalization applications if we have enough time.

# 3 Phases of the Project

The phases of the project are the following ones:

- 1. Learning Django framework
- 2. Learning Python language
- 3. Understanding of the integrations within applications in Django
- 4. Implementation of the applications
- 5. Batteries and debugging

- 6. Writing the following manuals:
  - Instalation of the Django framework through easy\_install or pip tools
  - Easy explanation for adding new modules or applications
  - List with applications that can be useful for NGOs

I believe that these tasks should require enough time to last until the end of June. However, in case of getting the objectives sooner, I would like to add the following functions:

- Integration of a CMS Open Source into the system.
- Addition of small applications related to geolocalization through the Geodjango framework

### 4 Material Resources

For the development of this project the use of the following resources will be necessary:

- IDE Eclipse or text editor
- Apache server
- Use of a CVS Concurrent Versions System, more likely hg or Git
- The programming language used will be Python, Javascript, HTML and CSS among others