PCPM

Planning and Control Production and Materials

**Warning**:

It is intended to be a simple document in order to briefly register the solution during the development process. This document is not prepared as a reference in documentation of projects.

Starting date: 28/01/2020

# Development Process

1. Configuration of the development environment

0. Install the last version of Python and create the main folder of the Project.

1. Create a virtual environment:

/> python -m venv <name\_of\_the\_folder>

2. Activate the virtual environment by running at <virtual\_environment\_folder> /Scripts/:

/> activate

3. Return to main folder and install Django and Django Rest Framework:

/> pip install Django

/> pip install djangorestframework

4. Save the requirements of your Project:

/> pip freeze > requirements.txt

5. Create the django Project (on main project folder):

/> django-admin startproject <name> .

6. Add the rest framework to installed applications on **settings.py**:

INSTALLED\_APPS = [

...

'rest\_framework',

]

7. Create the apps “pcp” and “pcm”, so move them into a new folder /backend:

/> python manage.py startapp pcp

/> python manage.py startapp pcm

/> move pcp backend

/> move pcm backend

2) Development

This Project was planned to have, initially, two major modules:

-Planning and Control of Production (PCP): provide functions to manage production data, including the production planning, performing and simulation. This planning is the shop floor planning, which is not concerned to supply chain features, laws or finance details.

-Planning and Control of Materials (PCM): functionalities to keep updated informations about to materials: BOM (Bill of Materials) of product models, quantity and deliveries from warehouse to production.

The PCP module was developed firstly, as well the PCM functions needed to run it properly. The second step must to complete the PCM module. The major accomplishments was deployed instead of just saved via Github. The integration process between functionalities, pages, backend and frontend, etc, occured continuously.

The directory structure contains folders to backend and frontend, among others folders and files. The backend folder has the applications PCP and PCM previously created. To connect PCP and PCM to project, it was followed the steps:

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The frontend have been developed using a React.js template which is adjusted according to the project demands.