

M010: Sistemes de Gestió Empresarial

UF2-Sistemes ERP-CRM. Explotació

Activitat 202 - Desenvolupament i integració de mòduls per a sistemes ERP-CRM

Curs: 2019-20

CFGS: DAM2

Alumne: Arnau Subirós Puigarnau

Data: 14-04-2020

Nom i Cognoms

Arnau Subirós Puigarnau

Data

14-04-2020

Activitat 202- Desenvolupament i integració de mòduls per a sistemes ERP-CRM

OBJECTIU DE L'ACTIVITAT

Desenvolupar un component per a un sistema ERP analitzant i utilitzant el llenguatge de programació incorporat.

PROCEDIMENT

- Emprant com a base del mòdul a desenvolupar l'activitat d'exemple de desenvolupament i integració de mòduls per a sistemes ERP-CRM, s'ha de pensar una utilitat per a Odoo, desenvolupada en llenguatge Python, que s'integri al sistema com a un nou mòdul.

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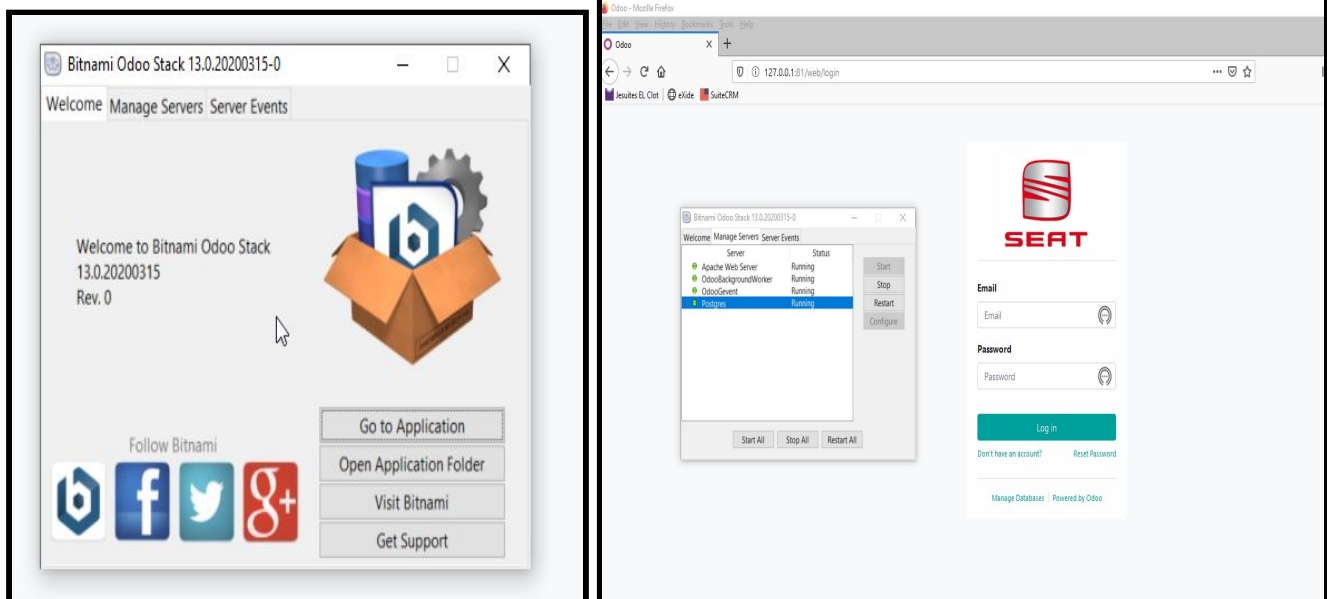
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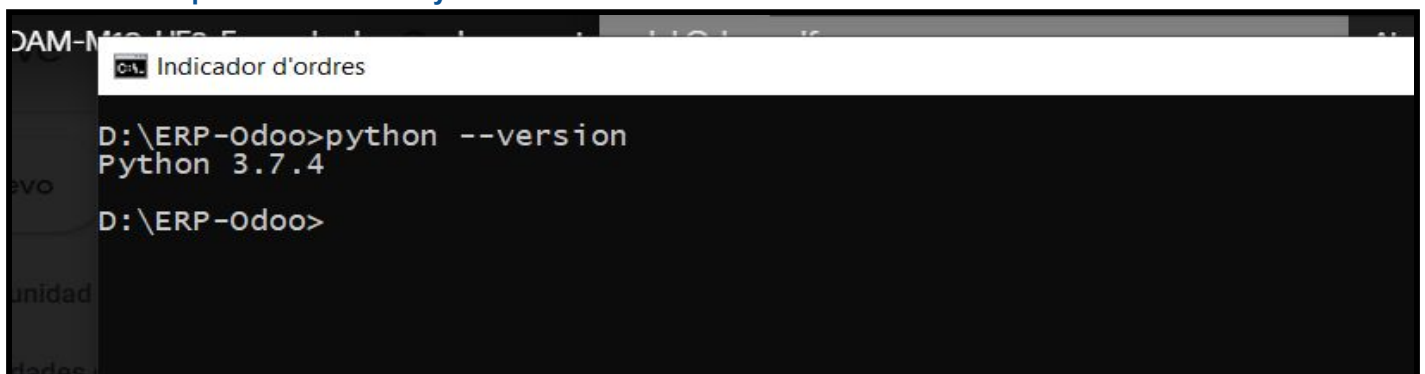
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1.-Desenvolupar un mòdul a Odoo 13

- Com que en aquesta pràctica l'objectiu no és instal·lar ODOO sinó desenvolupar un mòdul ,em descargo Stack Odoo desde <https://bitnami.com/stack/odoo>



- Verifiquem la versió de Python



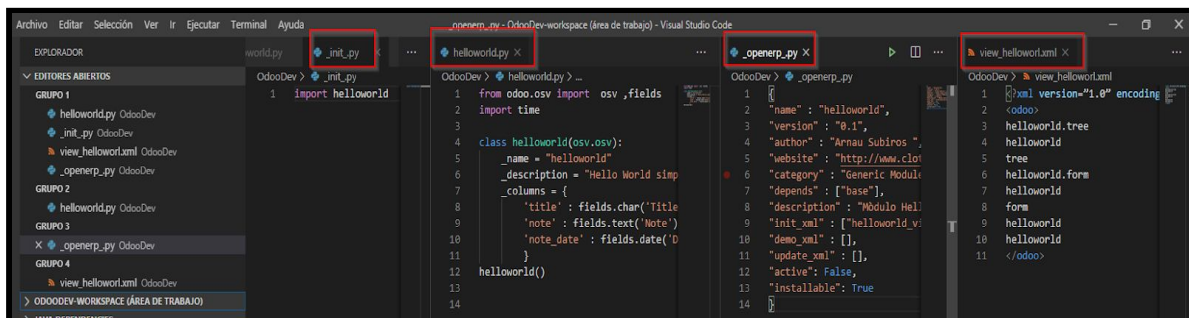
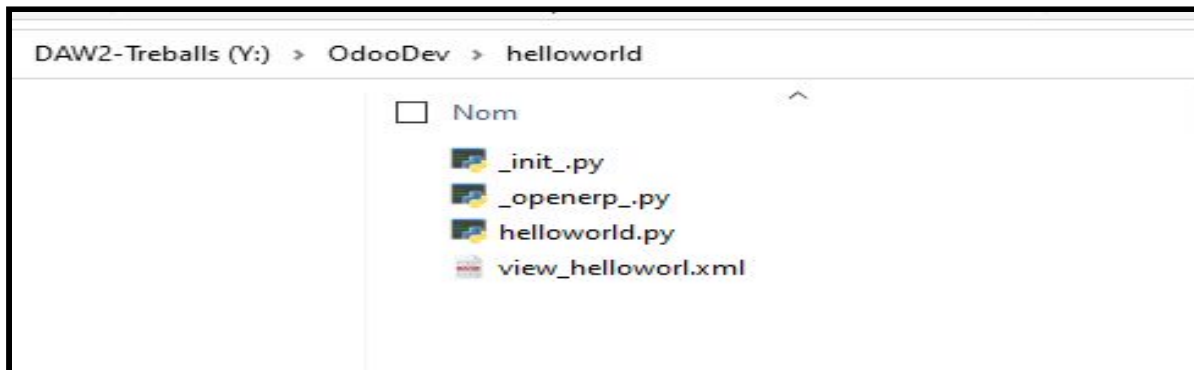
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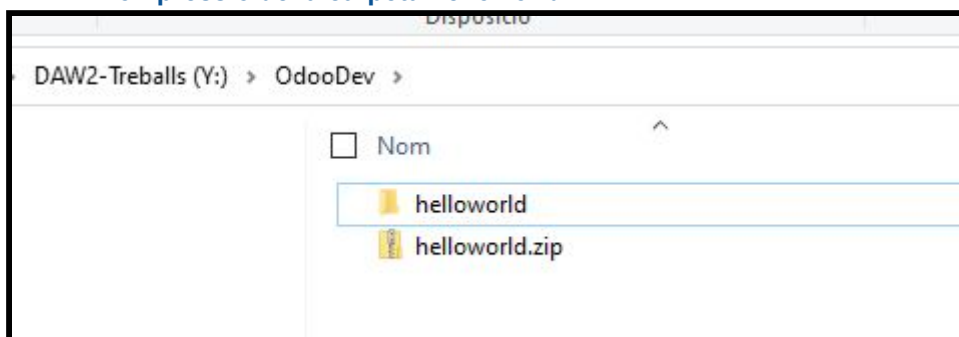
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- **Creació del mòdul “helloworld”**



- **Compressió de la carpeta helloworld.**



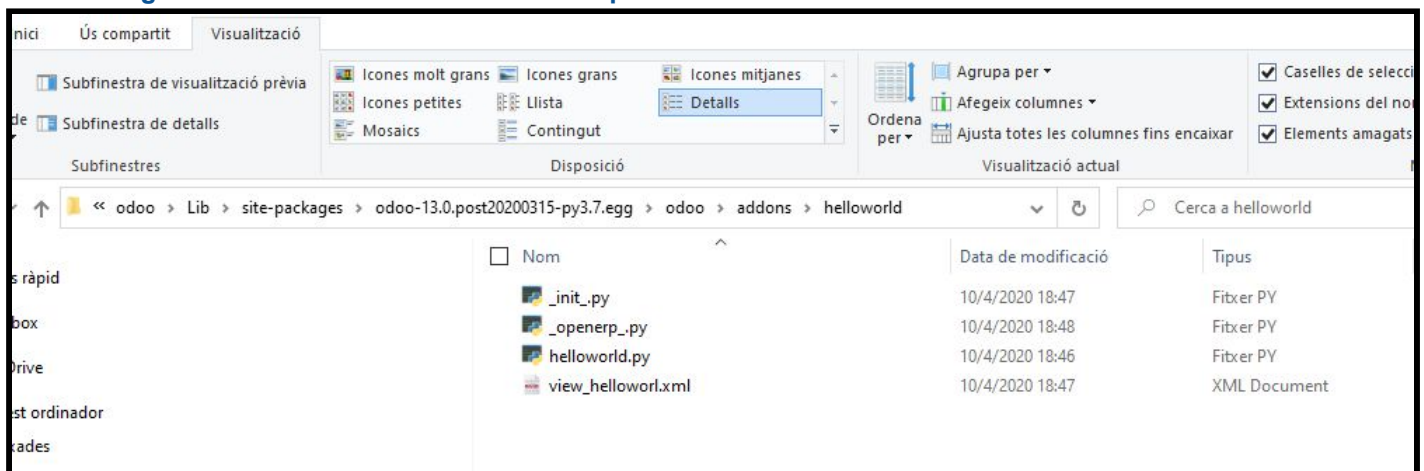
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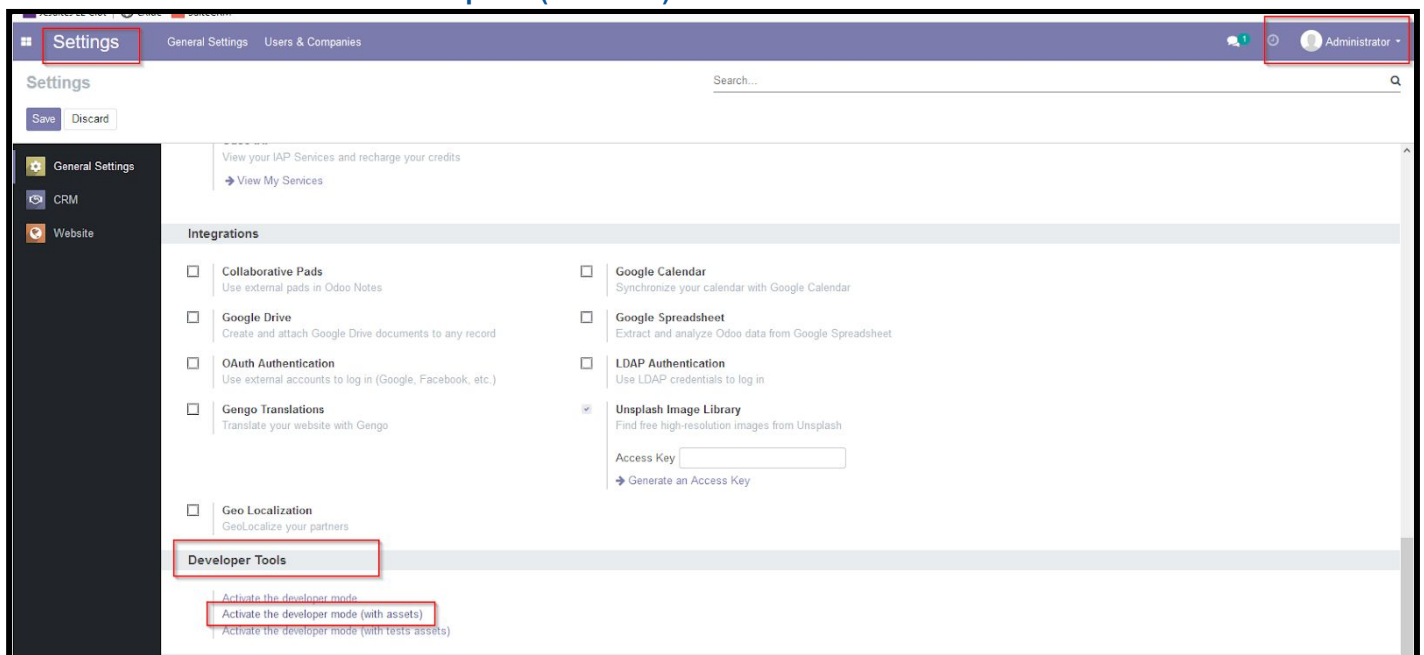
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- **Afegim el mòdul creat al directori corresponent.**



Nom	Data de modificació	Tipus
init.py	10/4/2020 18:47	Fitxer PY
openerp.py	10/4/2020 18:48	Fitxer PY
helloworld.py	10/4/2020 18:46	Fitxer PY
view_helloworld.xml	10/4/2020 18:47	XML Document

- **Habilitem el mode desenvolupador(+ assets)**



Settings

General Settings Users & Companies

Search...

Integrations

- ☐ Collaborative Pads
- ☐ Google Drive
- ☐ OAuth Authentication
- ☐ Gengo Translations
- ☐ Geo Localization
- ☐ Google Calendar
- ☐ Google Spreadsheet
- ☐ LDAP Authentication
- ☒ Unsplash Image Library

Developer Tools

- ☐ Activate the developer mode
- ☒ Activate the developer mode (with assets)
- ☐ Activate the developer mode (with tests assets)

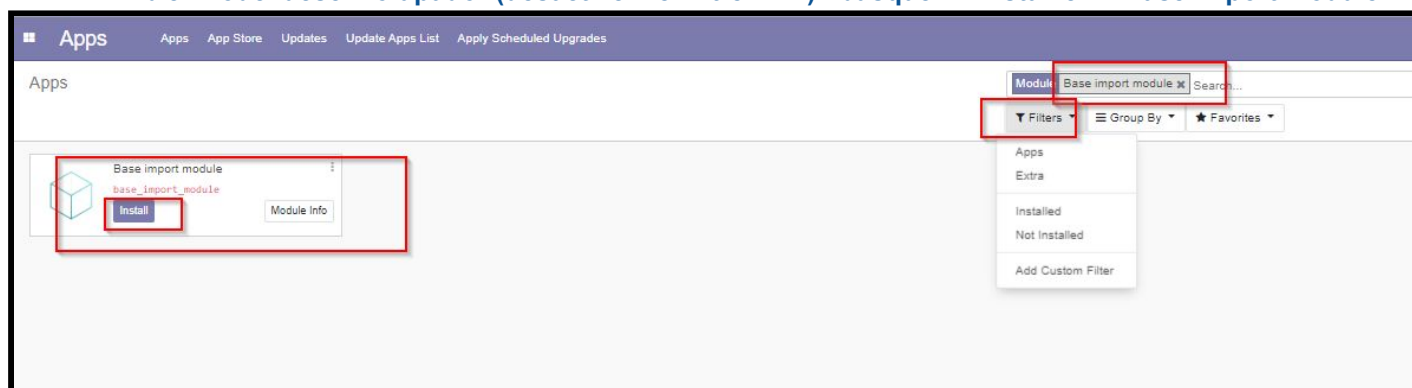
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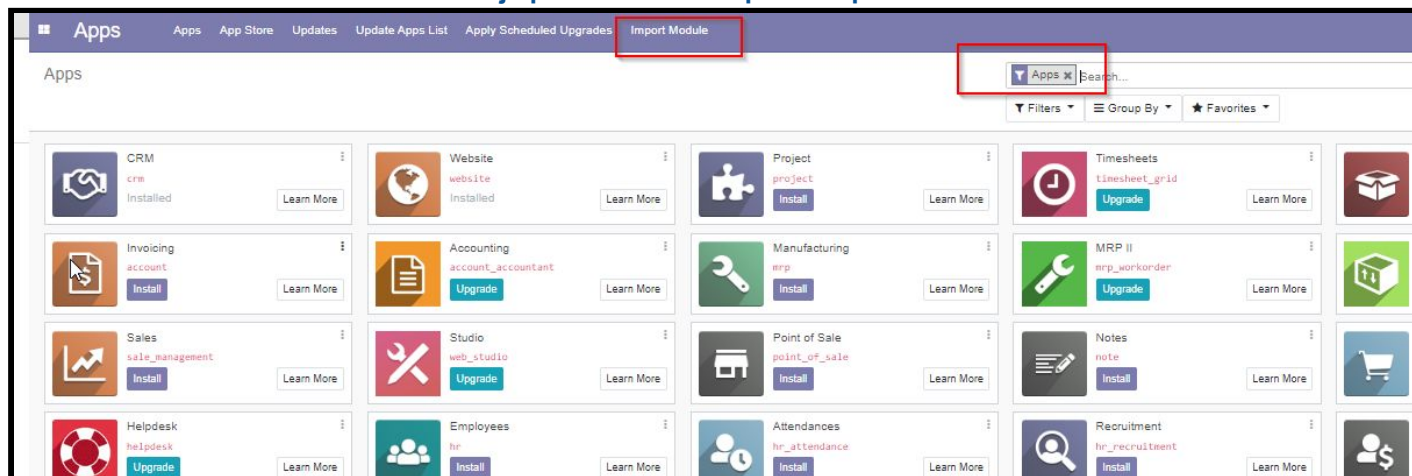
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- Amb el mode desenvolupador (desactivem el filtre APP) i busquem i instal·lem “Base import module”



- Tornem accedir al modul APP i ja podem veure l'opció “importar”



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- Revisem l'arxiu de configuració "odoo-server.conf"

The screenshot shows a Notepad++ window editing the file 'D:\ERP-Odoo\apps\odoo\conf\odoo-server.conf'. The file content is as follows:

```
1 (addons)
2 addons_path = D:\ERP-Odoo\apps\odoo\lib\site-packages\odoo-13.0.post20200315-py3.7.egg\odoo\addons
3 admin_passwd = 8dc6e33611
4 csv_internal_sep = ,
5 data_dir = D:\ERP-Odoo\apps\odoo\data
6 db_host = 127.0.0.1
7 db_maxconn = 64
8 db_name = bitnami_odoo
9 db_password = 8dc6e33611
10 db_port = 5432
11 db_sslmode = prefer
12 db_template = template0
13 db_user = bn_odoo
14 dbfilter =
15 demo = {}
16 email_from = arnausubiros@gmail.com
17 geolip_database = D:\user\share\GeoIP\GeoLite2-City.mmdb
18 http_enable = True
19 http_interface =
20 http_port = 8069
21 import_partial =
22 limit_memory_hard = None
23 limit_memory_soft = None
24 limit_request = None
25 limit_time_cpu = None
26 limit_time_real = None
27 limit_time_real_cron = None
28 list_db = True
29 log_db = False
30 log_db_level = warning
31 log_handler = :INFO
32 log_level = info
33 logfile = D:\ERP-Odoo\apps\odoo\log\production.log
34 longpolling_port = 8072
35 max_cron_threads = 2
36 csv_memory_age_limit = 1.0
37 csv_memory_count_limit = False
38 pg_path = D:\ERP-Odoo\postgresql\bin
39 pidfile =
40 proxy_mode = False
41 reportgz = False
42 screenshots =
43 screenshots = C:\Users\arnau\AppData\Local\Temp\odoo_tests
44 server_wide_modules = base,web
45 smtp_password = False
46 smtp_port = 25
47 smtp_server = localhost
48 smtp_ssl = False
49 smtp_user = False
50 syslog = False
51 test_enable = False
52 test_file =
53 test_tags = None
54 translate_modules = ['all']
55 unaccent = False
56 upgrade_path =
```

Overlaid on the Notepad++ window is a Windows File Explorer window showing the 'conf' directory. The file list is as follows:

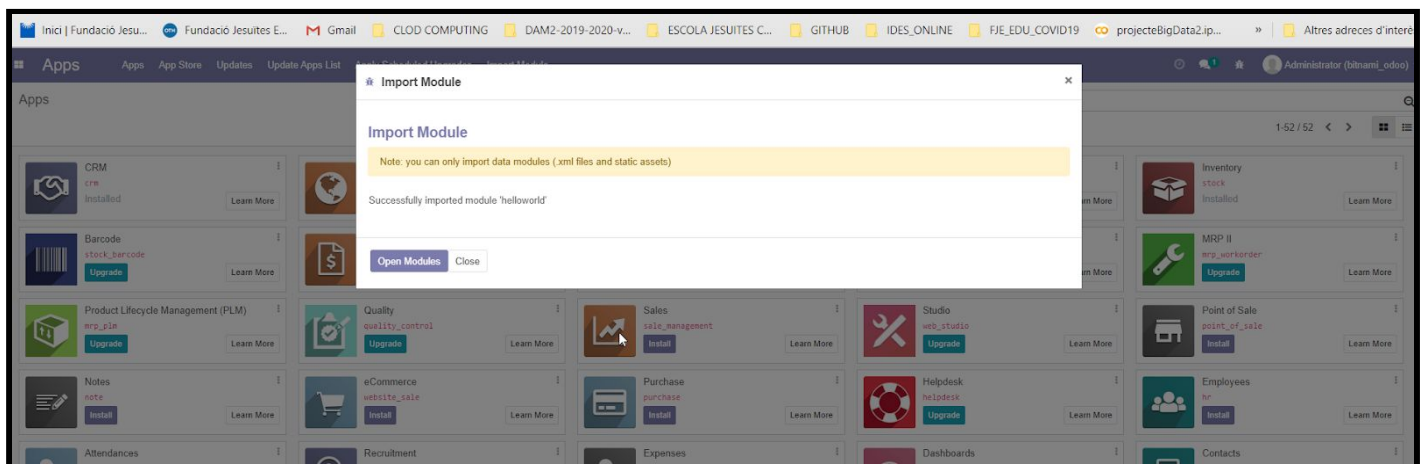
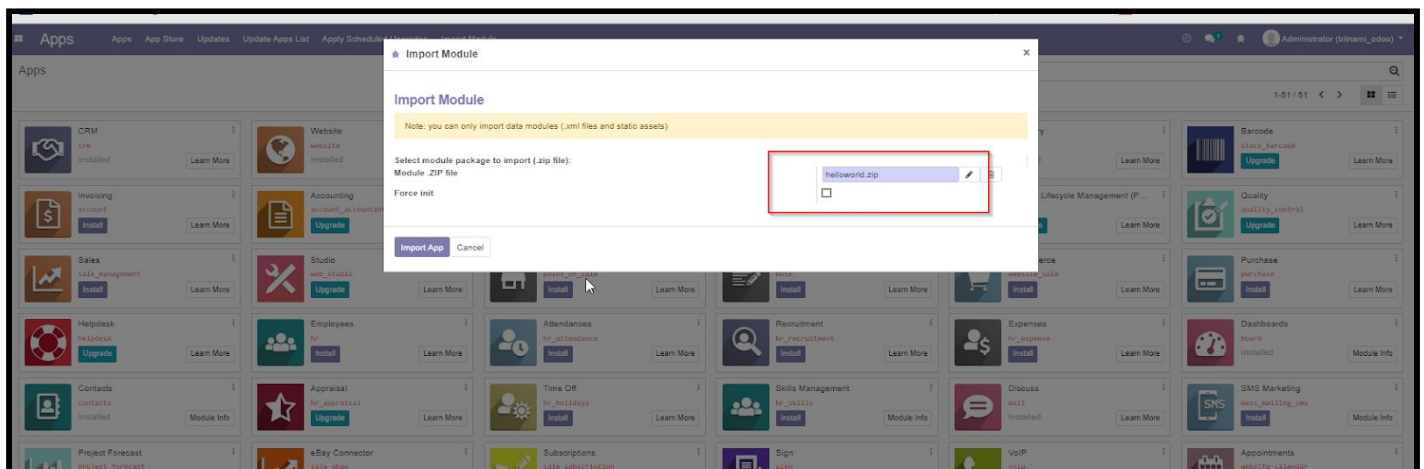
Nom	Data de modificació	Tipus
certs	6/4/2020 20:02	Carpeta de fitxers
banner.conf	6/4/2020 20:16	Fitxer CONF
httpd-app.conf	6/4/2020 20:16	Fitxer CONF
httpd-prefix.conf	6/4/2020 20:16	Fitxer CONF
httpd-vhosts.conf	6/4/2020 20:16	Fitxer CONF
odoo-server.conf	6/4/2020 20:14	Fitxer CONF

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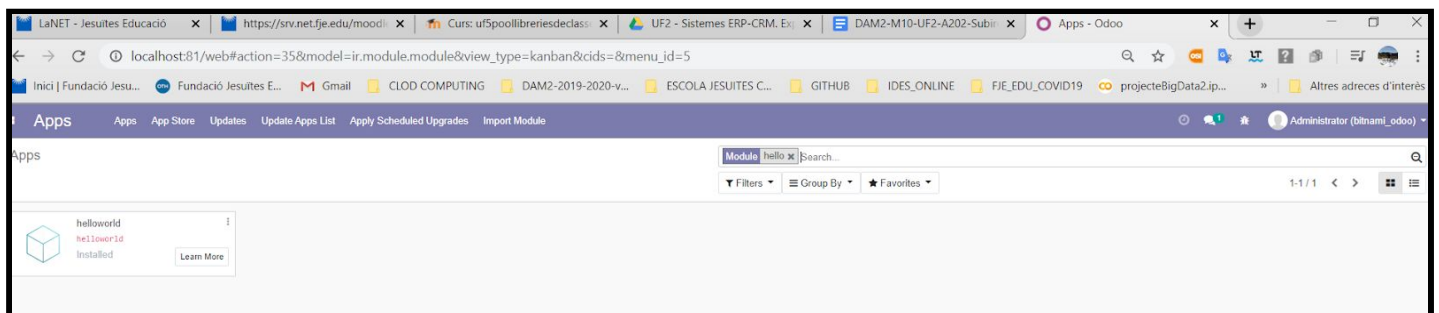
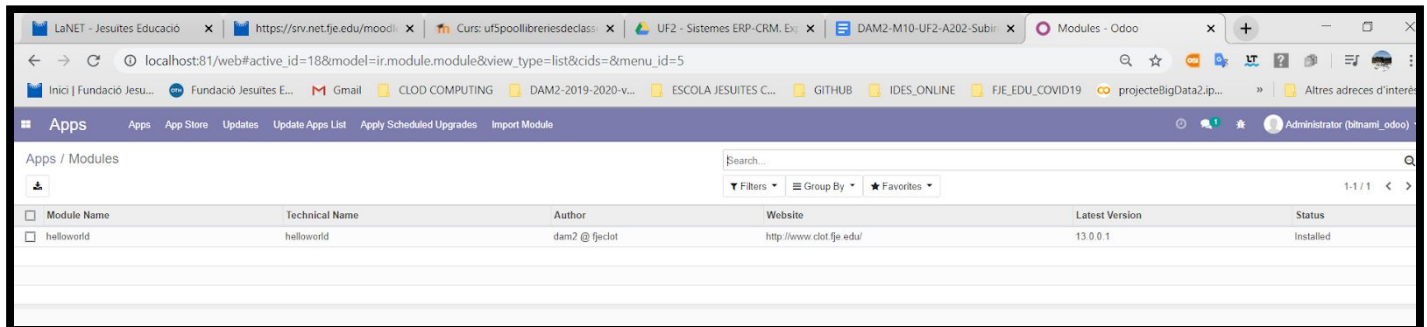


Nom i Cognoms

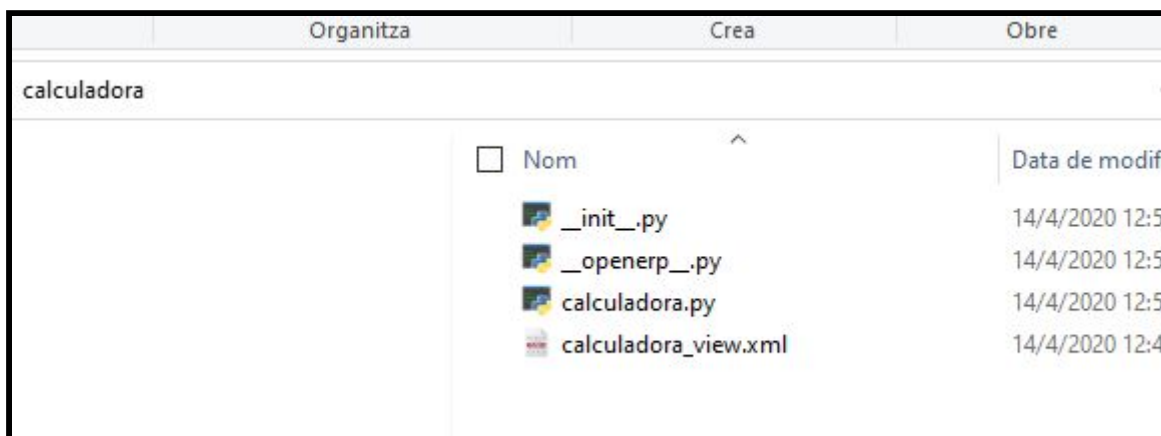
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- Fem una prova exemple - creant un mòdul anomenat Calculadora

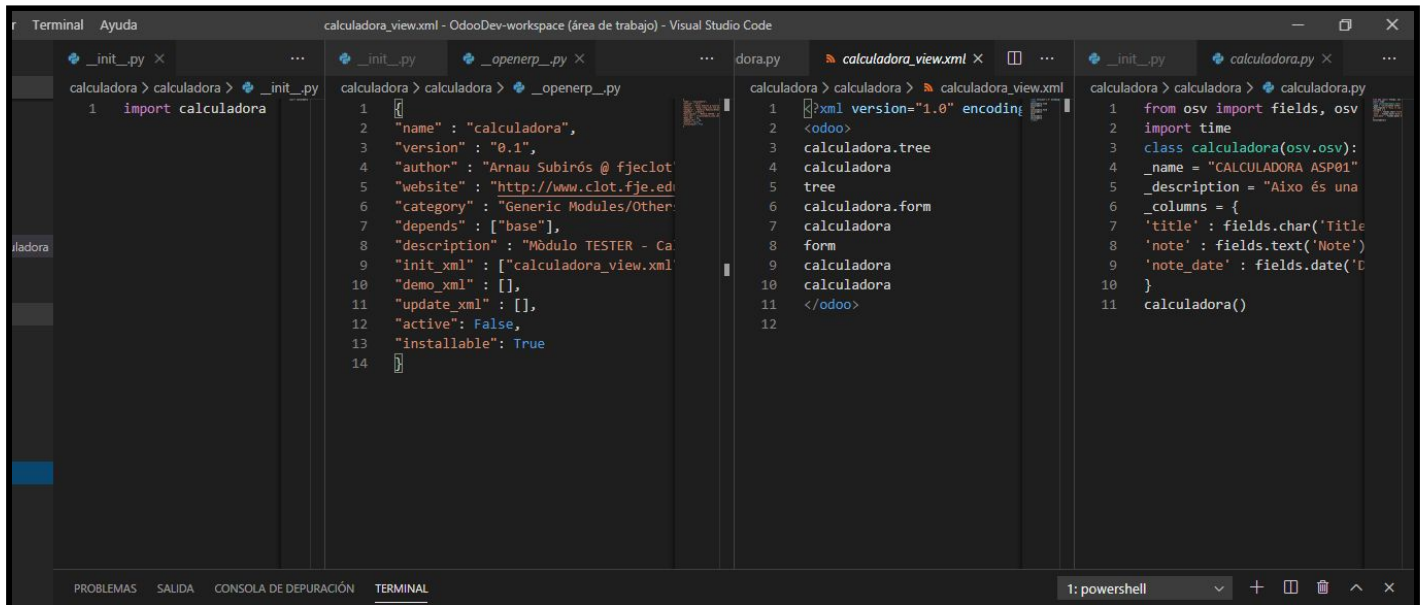


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The screenshot shows the Visual Studio Code interface with the following files open:

- `_init__.py`:

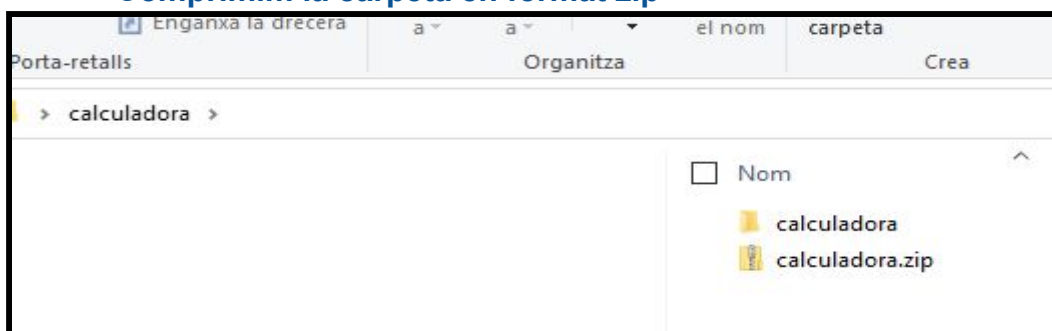
```
1 import calculadora
```
- `__openerp__.py`:

```
1 {
2     "name": "calculadora",
3     "version": "0.1",
4     "author": "Arnau Subirós @ fjeclot",
5     "website": "http://www.clot.fje.edu",
6     "category": "Generic Modules/Other",
7     "depends": ["base"],
8     "description": "Mòdul TESTER - Ca",
9     "init_xml": ["calculadora_view.xml"],
10    "demo_xml": [],
11    "update_xml": [],
12    "active": False,
13    "installable": True
14 }
```
- `calculadora_view.xml`:

```
1 <?xml version="1.0" encoding="utf-8" ?>
2 <odoo>
3     calculadora.tree
4     calculadora
5     tree
6     calculadora.form
7     calculadora
8     form
9     calculadora
10    calculadora
11 </odoo>
```
- `calculadora.py`:

```
1 from osv import fields, osv
2 import time
3 class calculadora(osv.osv):
4     _name = "CALCULADORA ASP01"
5     _description = "Aixo és una"
6     _columns = {
7         'title': fields.char('Title', 64),
8         'note': fields.text('Note'),
9         'note_date': fields.date('Date', 10),
10    }
11    calculadora()
```

- **Comprimim la carpeta en format zip**

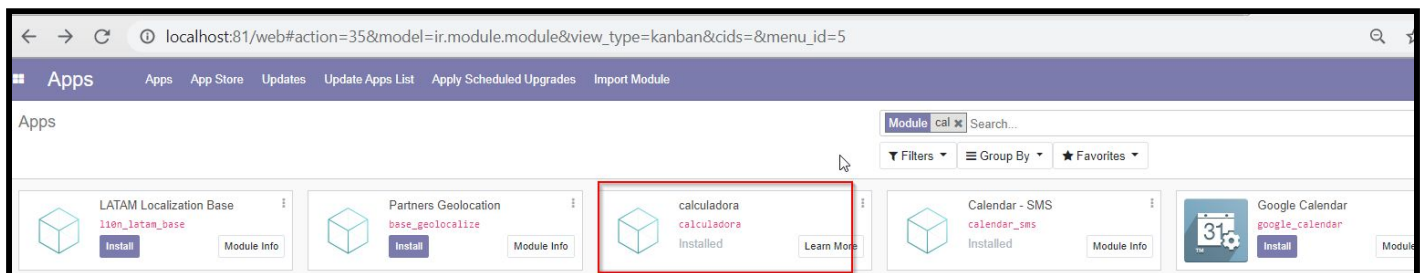
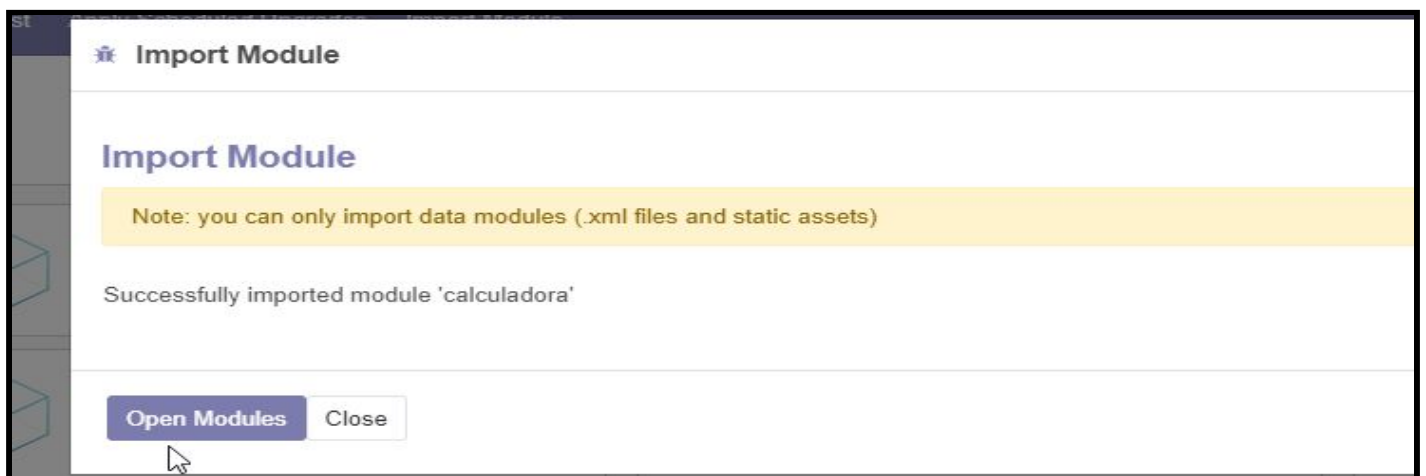
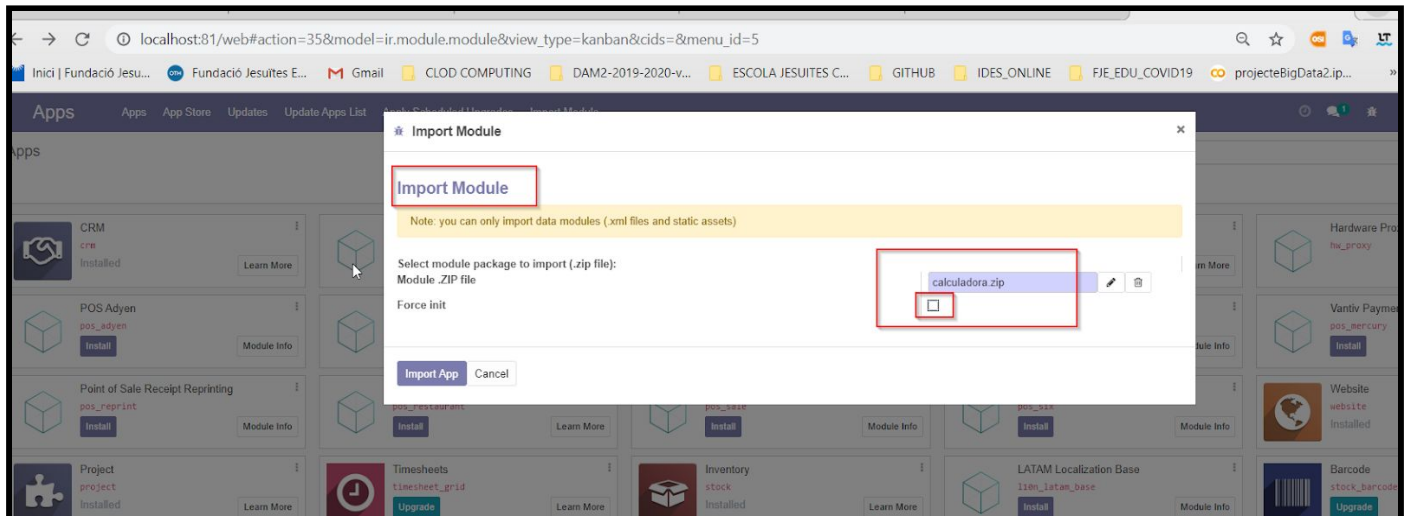


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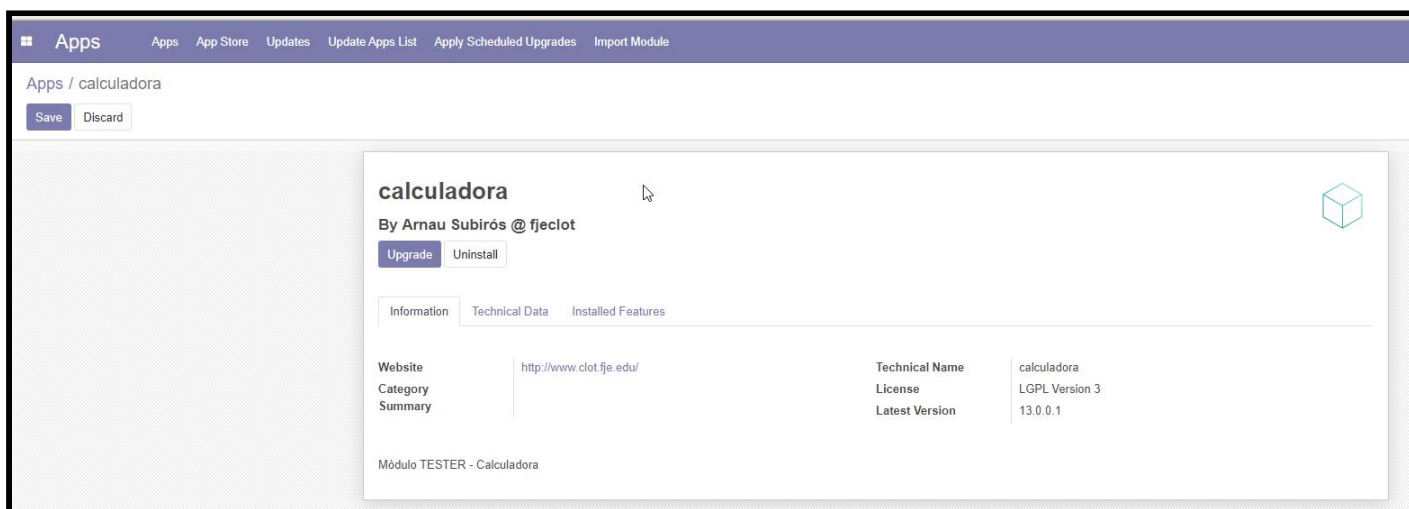


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The screenshot shows a web application interface for managing apps. The top navigation bar includes 'Apps', 'App Store', 'Updates', 'Update Apps List', 'Apply Scheduled Upgrades', and 'Import Module'. The main content area is titled 'Apps / calculadora' and features a 'Save' button and a 'Discard' button. The app details for 'calculadora' are displayed, including the developer 'By Arnau Subirós @ fjeclot', an 'Upgrade' button, and an 'Uninstall' button. Below this, there are tabs for 'Information', 'Technical Data', and 'Installed Features'. The 'Information' tab is active, showing the website 'http://www.clot.fje.edu/' and a 'Summary' section. The 'Technical Data' tab shows the 'Technical Name' as 'calculadora', the 'License' as 'LGPL Version 3', and the 'Latest Version' as '13.0.0.1'. The 'Installed Features' tab is currently empty. At the bottom, it indicates 'Mòdul TESTER - Calculadora'.

Information	Technical Data	Installed Features
Website Category Summary	Technical Name License Latest Version	
http://www.clot.fje.edu/	calculadora LGPL Version 3 13.0.0.1	

Mòdul TESTER - Calculadora

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2.- EXTRA Odoo 13 (VirtualBox)

- Farem proves, instal·lant Odoo 13 a una màquina virtual(Debian10) i importarem un mòdul de prova

Pasos a seguir :

1.Actualitzar el sistema

- `sudo apt update`
- `sudo apt -y upgrade`
- `sudo reboot`

2.Instal·lar PostgreeSQL

- `sudo apt update`
- `sudo apt -y install gnupg2`
- `wget --quiet -O - https://www.postgresql.org/media/keys/ACCC4CF8.asc | sudo apt-key add -`
- `echo "deb http://apt.postgresql.org/pub/repos/apt/ `lsb_release -cs`-pgdg main" | sudo tee /etc/apt/sources.list.d/pgdg.list`

3.Instal·lar PostgreeSQL 12 a Debian10

- `sudo apt update`
- `sudo apt -y install postgresql-12 postgresql-client-12`
- `sudo systemctl status postgresql`
- `sudo systemctl is-enabled postgresql`

4.Test de connexio PostgreSQL

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- `sudo su -postgres`
- `psql -c "alter user postgres with password '1234' "`
- `psql =# \conninfo`
 - `postgres=# CREATE DATABASE odoodb01;`
 - `postgres=# CREATE USER odooUser1 WITH ENCRYPTED PASSWORD '1234';`
 - `postgres=# GRANT ALL PRIVILEGES ON DATABASE odoodb01 to odooUser1;`
 - `postgres=# \l`
- `sudo systemctl restart postgresql`

5.Instal.lar wkhtmltopdf a Debian10

- `sudo apt update`
- `sudo apt -y install wget`
- `wget https://github.com/wkhtmltopdf/wkhtmltopdf/releases/download/0.12.5/wkhtmltox_0.12.5-1_stretch_amd64.deb`
- `sudo dpkg -i wkhtmltox_0.12.5-1.stretch_amd64.deb`
- `sudo apt -f install`
- `wkhtmltopdf --version`

6.Instal.lar Odoo 13 a Debian10

- `wget -O - https://nightly.odoo.com/odoo.key | sudo apt-key add -`
- `echo "deb http://nightly.odoo.com/13.0/nightly/deb/ ." | sudo tee /etc/apt/sources.list.d/odoo.list`
- `sudo apt update`
- `sudo apt install odoo`
- `sudo systemctl status odoo`
- `sudo systemctl enable --now odoo`
- `sudo netstat -atupn | grep 8069`
- <http://localhost:8069/web/database/selector>

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versio PosgreeSQL

```
arsupu@asp-debian10: ~  
Fitxer Edita Vista Cerca Terminal Ajuda  
postgres@asp-debian10:~$ psql  
psql (12.2 (Debian 12.2-2.pgdg100+1))  
Type "help" for help.  
  
postgres=#
```

verifiquem l'estat del servidor

```
Debian-20191209 (Captura 2-Odoo-Prova01) [S'està executant] - Oracle VM VirtualBox  
Fitxer Màquina Visualitza Entrada Dispositius Ajuda  
Aplicacions Llocs Sistema  
arsupu@asp-debian10: ~  
Fitxer Edita Vista Cerca Terminal Ajuda  
arsupu@asp-debian10:~$ sudo systemctl status odoo.service  
[sudo] contrasenya per a arsupu:  
● odoo.service - Odoo Open Source ERP and CRM  
   Loaded: loaded (/lib/systemd/system/odoo.service; enabled; vendor preset: enabled)  
   Active: active (running) since Mon 2020-04-13 11:34:53 CEST; 23h ago  
 Main PID: 10721 (odoo)  
    Tasks: 4 (limit: 2347)  
  Memory: 175.6M  
   CGroup: /system.slice/odoo.service  
           └─10721 /usr/bin/python3 /usr/bin/odoo --config /etc/odoo/odoo.conf --logfile /var/log/odoo/odoo-server.log  
  
d'abr. 13 11:34:53 asp-debian10 systemd[1]: Started Odoo Open Source ERP and CRM.  
arsupu@asp-debian10:~$
```

revisem que el port 8069 estigui actiu

```
Debian-20191209 (Captura 2-Odoo-Prova01) [S'està executant] - Oracle VM VirtualBox  
Fitxer Màquina Visualitza Entrada Dispositius Ajuda  
Aplicacions Llocs Sistema  
arsupu@asp-debian10: ~  
Fitxer Edita Vista Cerca Terminal Ajuda  
arsupu@asp-debian10:~$ sudo netstat -atupn | grep 8069  
tcp        0      0 0.0.0.0:8069          0.0.0.0:*             LISTEN      10721/python3  
arsupu@asp-debian10:~$
```

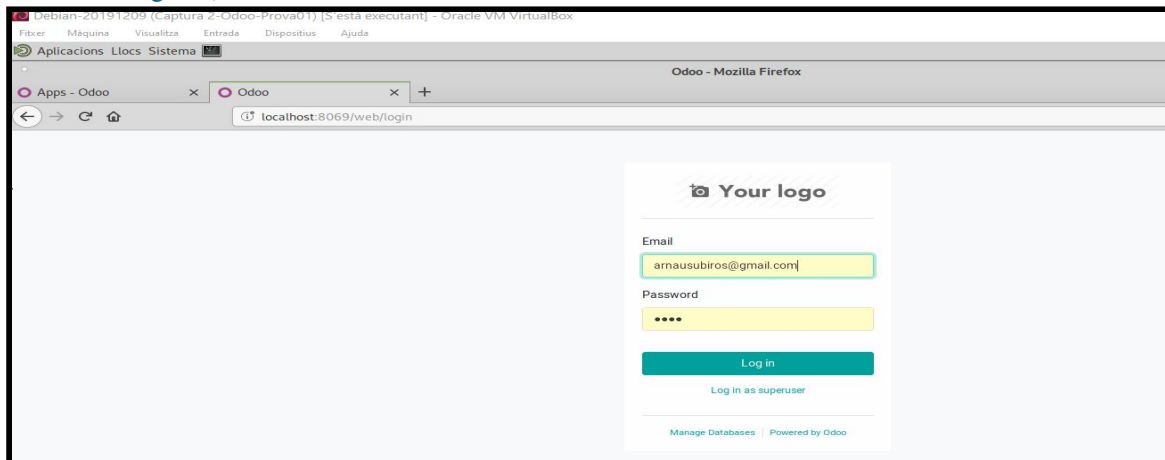

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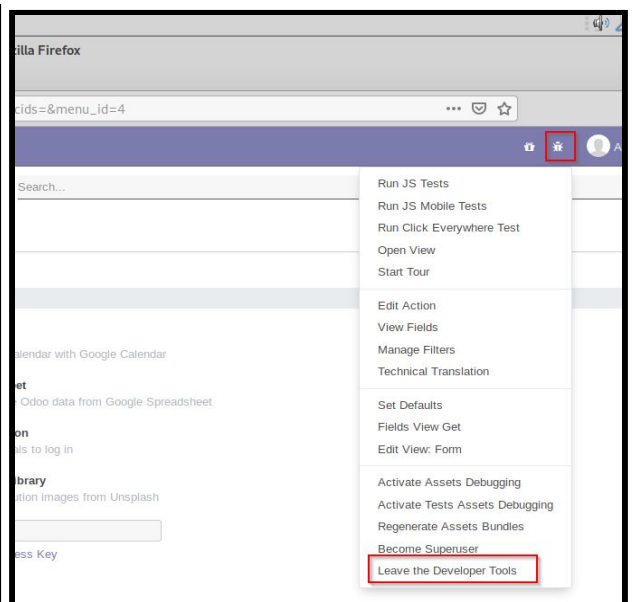
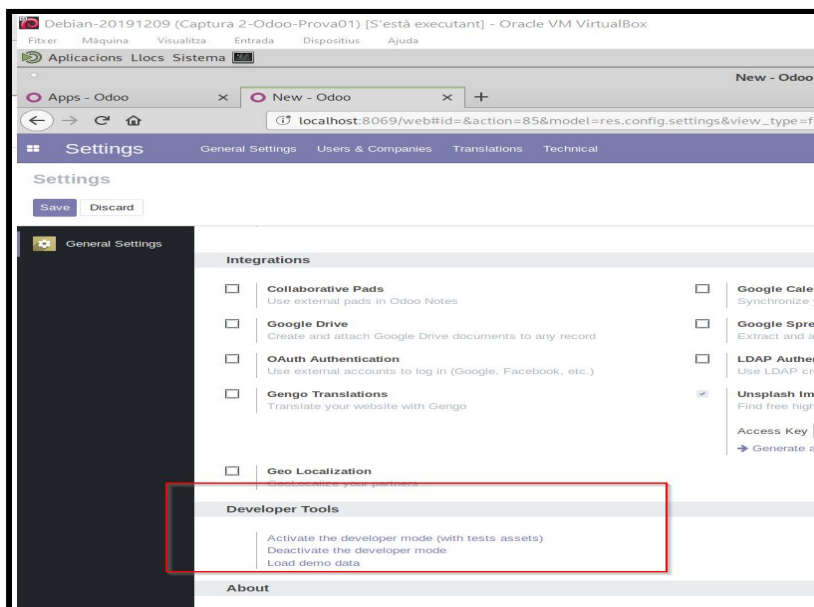
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Desde el navegador, accedim a Odoo



Activem el modul desenvolupador +assets



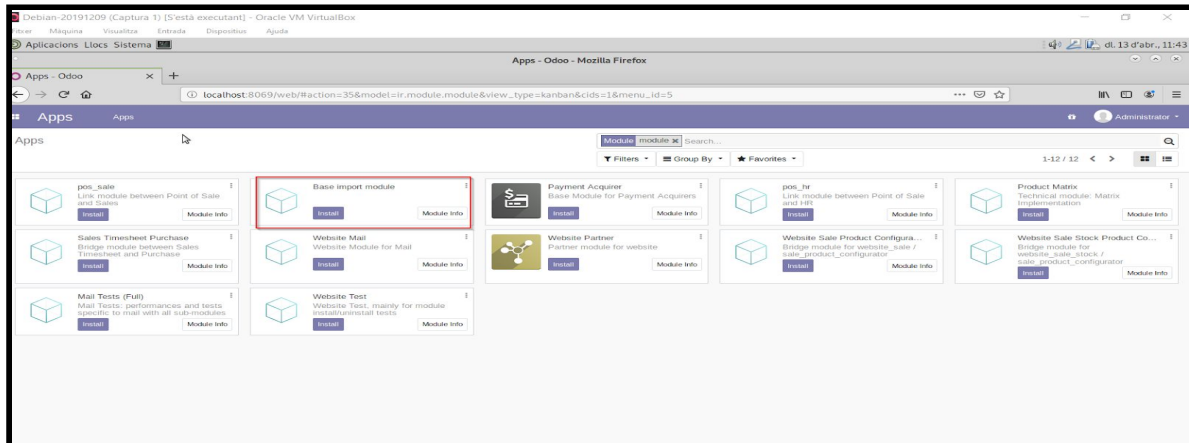
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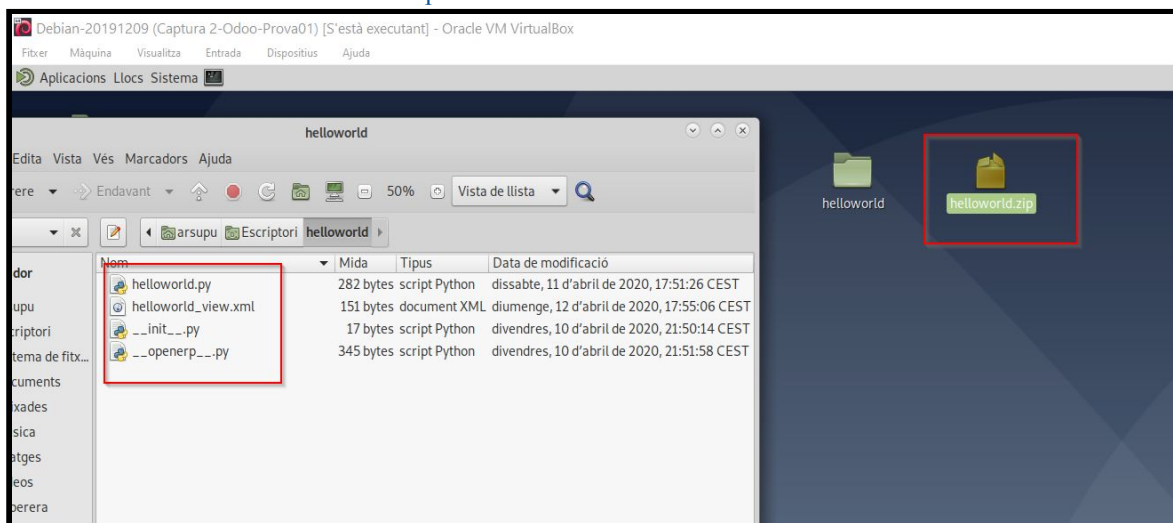
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En opcions APP , triem el filtre “APP” i instal·lem el modul “ Base Import Module”



Crecio del mòdul “helloworld” i el comprimim”



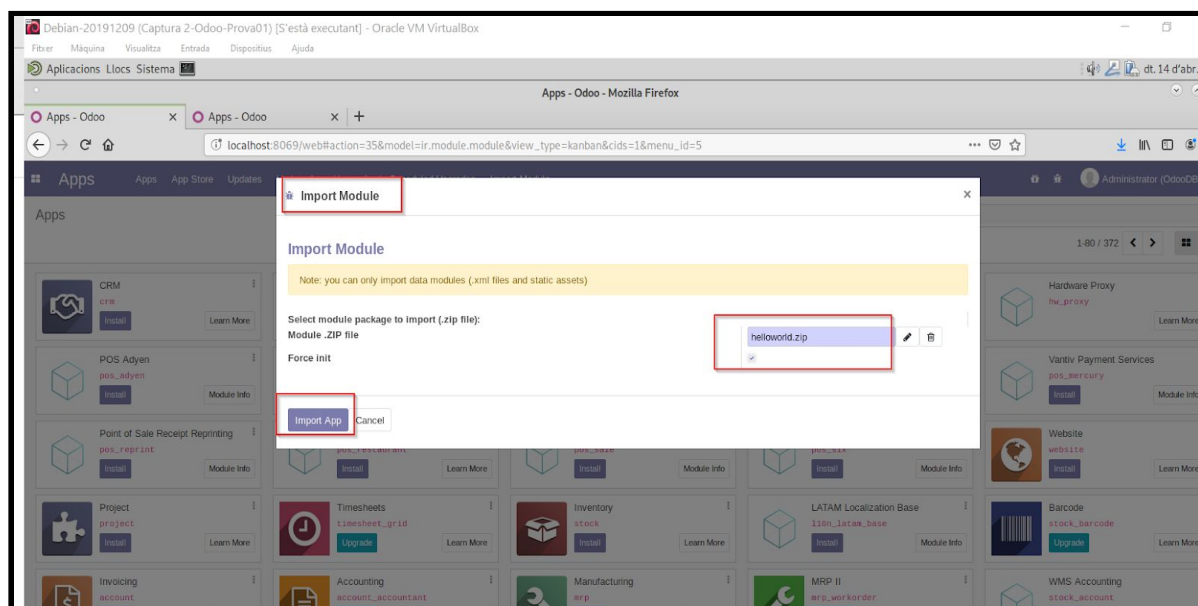
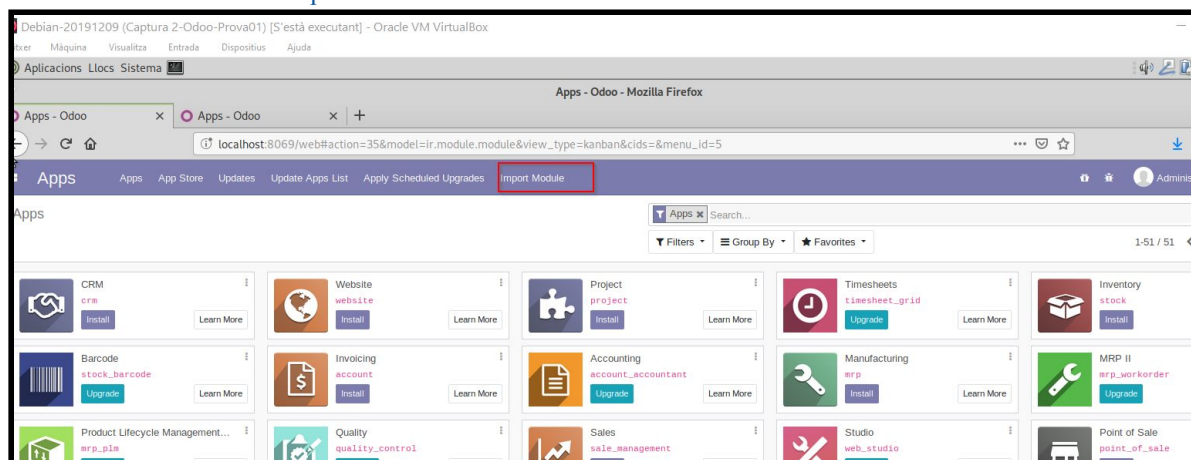
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Desde APPS seleccionem Import Mòdul

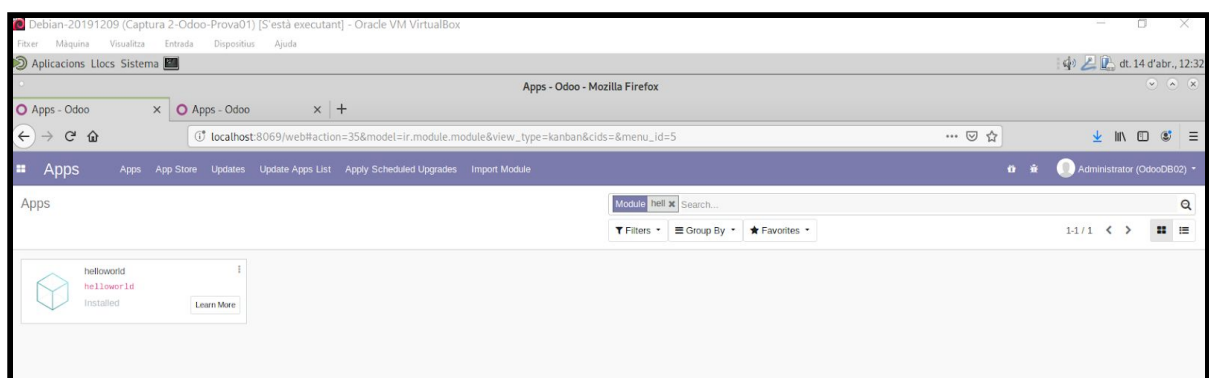
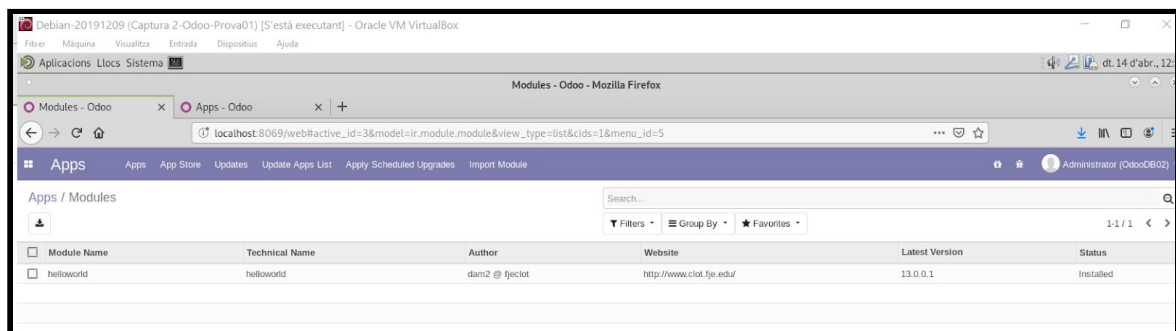
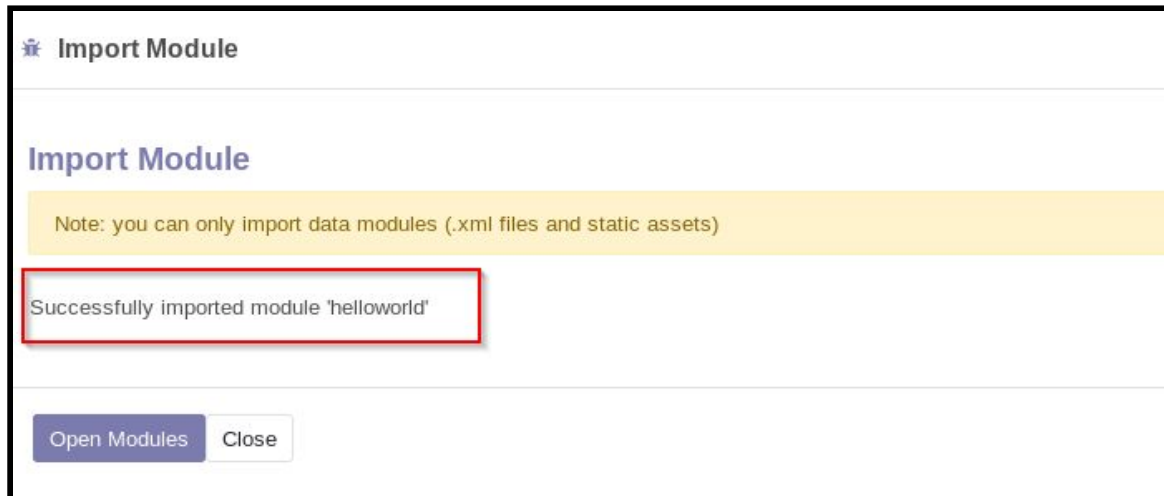


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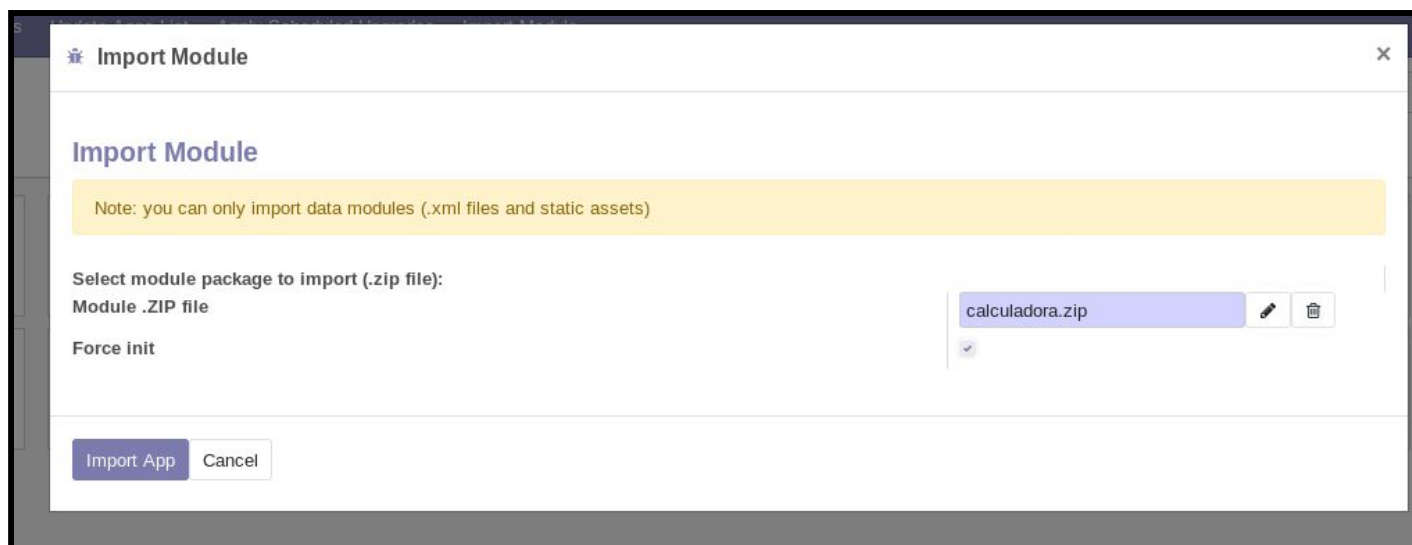
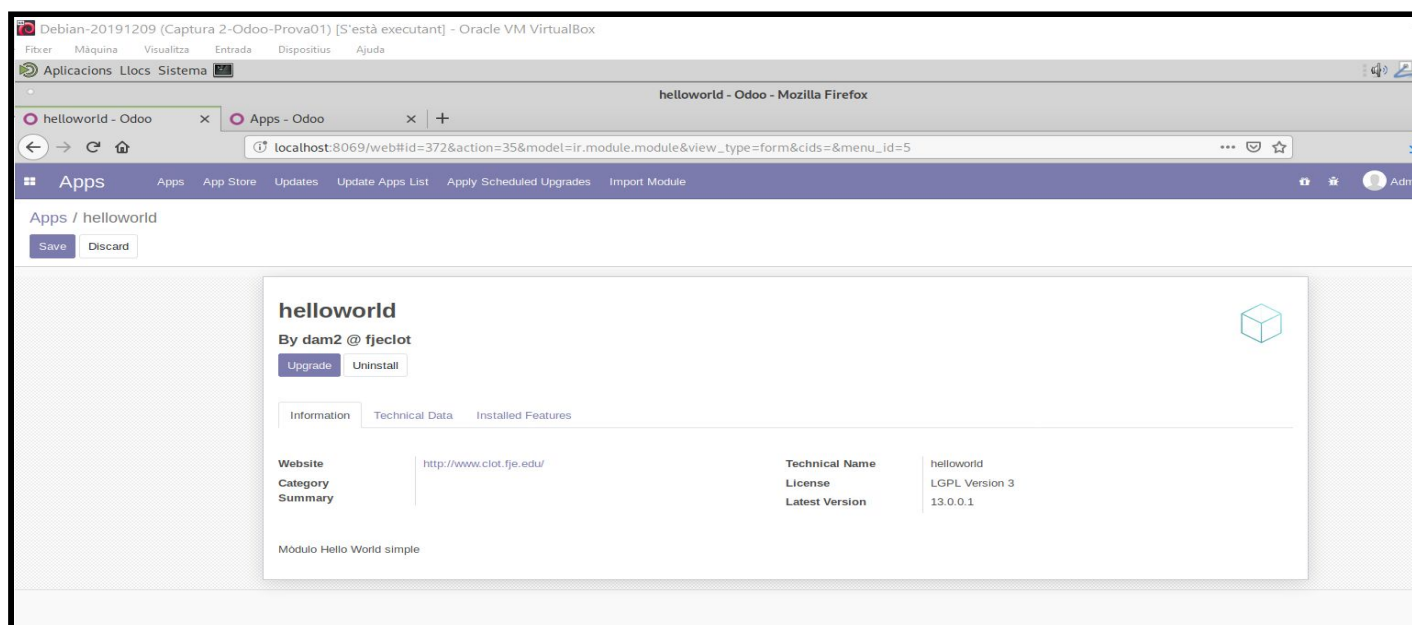


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Debian-20191209 (Captura 2-Odoo-Prova01) [S'està executant] - Oracle VM VirtualBox

Fitxer Màquina Visualitza Entrada Dispositius Ajuda

Aplicacions Llocs Sistema

calculadora - Odoo - Mozilla Firefox

Apps - Odoo x calculadora - Odoo x +

localhost:8069/web#id=373&active_id=5&model=ir.module.module&view_type=form&cids=&menu_id=5

Apps Apps App Store Updates Update Apps List Apply Scheduled Upgrades Import Module

Apps / Modules / calculadora

Action

calculadora

By Arnau Subirós @ fjeclot

Upgrade Uninstall

Information Technical Data Installed Features

Website	http://www.clot.fje.edu/	Technical Name	calculadora
Category		License	LGPL Version 3
Summary		Latest Version	13.0.0.1

Mòdul TESTER - Calculadora

Nom i Cognoms**Data**

Arnau Subirós Puigarnau

14-04-2020

3.-BIBLIOGRAFIA

- <https://stackoverflow.com/questions/22259551/openerp-custom-module-not-showing-after-modules-list-update/22355880>
- <https://docs.bitnami.com/installer/apps/odoo/configuration/install-plugins>
- https://doc.odoo.com/6.0/developer/2_4_module_development/module_descriptor/
- <https://erpcrmpymes.wordpress.com/2018/02/17/linea-de-comandos-e-instalacion-de-nuevos-modulos-temas/>
- <https://docs.bitnami.com/google/apps/odoo/configuration/install-plugins/>
- <https://hub.packtpub.com/step-by-step-guide-to-creating-odoo-addon-modules/>
- <https://computingforgeeks.com/how-to-install-odoo-on-debian-10-linux/>