



UNIVERSIDAD DE TALCA
FACULTAD DE INGENIERÍA
ESCUELA DE INGENIERÍA CIVIL EN BIOINFORMÁTICA

Bases de Datos Avanzadas
Guía 1 - Unidad I
MongoDB

Actividad

Desarrolle una simple aplicación escrita en Python que sea capaz de realizar las operaciones básicas CRUD sobre una colección en la BD.

Algunas consideraciones:

- Cree un entorno virtual¹ para trabajar con python 3.
- La aplicación debe ser usada en la terminal.
- Cree una BD con una colección y trabaje sobre ella.
- El tema es libre.
- Debe utilizar un driver² para python que le permita interactuar con la BD.

Entrega

Suba a Educandus en link al repositorio en alguna plataforma GIT.

¹<https://openwebinars.net/blog/entornos-de-desarrollo-virtuales-con-python3/>

²<https://docs.mongodb.com/drivers/python/>

Información adicional

Entornos virtuales

Pasos para crea un entorno virtual:

- Instalamos el módulo para crear entornos virtuales (como usuario *root*):

```
$ apt install python3-venv
```

- Creamos el entorno con el nombre venv-python3 (como usuario *normal*):

```
$ python3 -m venv venv-python3
```

- Activamos en entorno virtual (y trabajamos):

```
$ source venv-python3/bin/activate
```

- Salimos del entorno virtual:

```
$ deactivate
```

PIP

Para gestionar módulos en el entorno virtual utilizamos el comando pip:

```
(venv-python3) amvaldesj@primate:~$ pip
Usage:
  pip <command> [options]

Commands:
  install           Install packages.
  download          Download packages.
  uninstall         Uninstall packages.
  freeze            Output installed packages in requirements format.
  list              List installed packages.
  show              Show information about installed packages.
  check             Verify installed packages have compatible dependencies.
  config            Manage local and global configuration.
  search            Search PyPI for packages.
  wheel             Build wheels from your requirements.
  hash              Compute hashes of package archives.
  completion        A helper command used for command completion.
  debug             Show information useful for debugging.
  help              Show help for commands.

General Options:
  -h, --help          Show help.
  --isolated           Run pip in an isolated mode, ignoring environment variables and user configuration.
  -v, --verbose        Give more output. Option is additive, and can be used up to 3 times.
  -V, --version        Show version and exit.
  -q, --quiet          Give less output. Option is additive, and can be used up to 3 times (combined with most other options).
  --log <path>        Path to a verbose appending log.
  --proxy <proxy>      Specify a proxy in the form [user:passwd@]proxy.server:port.
  --retries <retries> Maximum number of retries each connection should attempt (default 5 times unless changed here).
  --timeout <sec>      Set the socket timeout (default 15 seconds).
  --exists-action <action> Default action when a path already exists: (s)witch, (i)gnore, (w)ipe, (a)bort.
  --trusted-host <hostname> Mark this host or host:port pair as trusted, even though it does not have a valid certificate.
  --cert <path>        Path to alternate CA bundle.
  --client-cert <path> Path to SSL client certificate, a single file containing the private key and the certificate.
  --cache-dir <dir>    Store the cache data in <dir>.
  --no-cache-dir       Disable the cache.
  --disable-pip-version-check Don't periodically check PyPI to determine whether a new version of pip is available for
                        installation. (NOTE: Pip > 6.0.0 will not check by default.)
  --no-color            Suppress colored output
  --no-python-version-warning Silence deprecation warnings for upcoming unsupported Pythons.
```