# Installation Procedure for Ubuntu Linux

1. Install Ubuntu server preferably version 20.04
2. Update the system: **#apt-get update**
3. Install nodeJS: **#apt-get install nodejs**
4. Install the latest mongodb:
   (reference: https://docs.mongodb.com/manual/tutorial/install-mongodb-on-ubuntu/)
   a. **#apt-get install gnupg**
   b. **#wget -qO - https://www.mongodb.org/static/pgp/server-4.4.asc | sudo apt-key add -**
   c. **#echo "deb [ arch=amd64,arm64 ] https://repo.mongodb.org/apt/ubuntu focal/mongodb-org/4.4 multiverse" | sudo tee /etc/apt/sources.list.d/mongodb-org-4.4.list**
   d. **#apt-get update**
   e. **#apt-get install -y mongodb-org**
   f. **#systemctl start mongod**
   g. To verify status of mongodb: **#systemctl status mongod**
   h. configure mongodb to start on reboot: **#systemctl enable mongod**
5. Install libreoffice: **#apt-get install libreoffice**
6. Install PDF Tollkit: **#apt-get install pdftk**
7. Install Poppler Utilities: **#apt-get install poppler-utils**
8. Install Tesseract OCR: **#apt-get install tesseract-ocr**
9. Install Ghost Script: **#apt-get install ghostscript**
10. Create default "drive" folder and its required subdirectories (case sensitive):
    a. **#mkdir /drive**
    b. **#mkdir /drive/Archive**
    c. **#mkdir /drive/incoming**
    d. **#mkdir /drive/Recoverhere**
    e. **#mkdir "/drive/Routing Slip"** (put double quote for 2 words)
    f. **#mkdir /drive/textML**
11. Create folder for the e-Dokyumento: **#mkdir /edokyu**
12. Download the latest e-Dokyumento from the GitHub:

    **#git clone https://github.com/nelsonmaligro/e-Dokyumento /edokyu/**

13. Import the default collections for the "docMS" database:

a. **#mongoimport --host="localhost" --db=docMS --collection=useraccs --drop --file=/edokyu/models/useraccs.json**
b. **#mongoimport --host="localhost" --db=docMS --collection=activitylogs --drop --file=/edokyu/models/activitylogs.json**
c. **#mongoimport --host="localhost" --db=docMS --collection=branches --drop --file=/edokyu/models/branches.json**
d. **#mongoimport --host="localhost" --db=docMS --collection=classes --drop --file=/edokyu/models/classes.json**
e. **#mongoimport --host="localhost" --db=docMS --collection=commologs --drop --file=/edokyu/models/commologs.json**
f. **#mongoimport --host="localhost" --db=docMS --collection=monitoraccs --drop --file=/edokyu/models/monitoraccs.json**
g. **#mongoimport --host="localhost" --db=docMS --collection=pndocs --drop --file=/edokyu/models/pndocs.json**
h. **#mongoimport --host="localhost" --db=docMS --collection=settings --drop --file=/edokyu/models/settings.json**
i. **#mongoimport --host="localhost" --db=docMS --collection=tags --drop --file=/edokyu/models/tags.json**
j. **#mongoimport --host="localhost" --db=docMS --collection=tempmonitoraccs --drop --file=/edokyu/models/tempmonitoraccs.json**

14. Start the e-Dokyumento Application:
    a. **#cd /edokyu**
    b. **#node index.js**
15. Congratulations! You can now browse the e-dokyumento at : https://<ip address>

## Post Installation Procedure

1. To make the e-Dokyumento run automatically during reboot:
   a. Install the NPM package manager: **#apt-get install npm**
   b. Install forever module: **#npm install forever –g**
   c. Install nodemon module: **#npm install nodemon -g**
   d. Edit crontab: **#crontab –e**
   e. Add the following 2 lines:

**@reboot cd /edokyu && /usr/local/bin/forever -c "/usr/local/bin/nodemon --exitcrash" index.js > /dev/null 2>&1**

**@reboot cd /edokyu/controllers && /usr/local/bin/forever -c "/usr/local/bin/nodemon --exitcrash" folderwatch.js > /dev/null 2>&1**

f. Save and reboot

2. In order to enable and use the Intelligent Document Classification through the Machine Learning, we need to install the required python libraries.

   a. Ensure Python version 3 is installed: **#python --version**
   b. If not, Install Python3: **#apt-get install python3**
   c.
   d. Make Python3 as the default alias for python: **#apt-get install python-is-python3**
   e. Install Python package manager to use pip command: **#apt-get install python3-pip**
   f. Install Tensorflow: **#pip3 install tensorflow**
   g. Install Pandas: **#pip3 install pandas**
   h. Install Keras core: **#pip3 install keras**
   i. Install Keras Model: **#pip3 install keras-models**
   j. **Install PyMongo: #pip3 install pymongo**
   k. Browse the e-Dokyumento using the browser and login as Administrator account
   l. Click “Advanced”,“Settings” and check the “Enable Machine Learning”, then click save.

3.