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:

   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 folder for the e-Dokyumento: **#mkdir /edokyu**
11. Download the latest e-Dokyumento from the GitHub:

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

12. Create default "drive": **#mv /edokyu/temp/drive /**
13. Import the default collections for the "docMS" database:
    a. **#chmod ugo+x /edokyu/data/restore.sh**
    b. **#/edokyu/data/restore.sh**
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 (ctrl + o then ctrl+ x)
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 sklearn: #pip3 install sklearn**
   k. **Install PyMongo: #pip3 install pymongo**
   l. Browse the e-Dokyumento using the browser and login as Administrator account
   m. Click “Advanced”,“Settings” and check the “Enable Machine Learning”, then click save.

3. Configure the User Accounts:
   a. Login as Administrator and admin@123 for the password
   b. Go to “View/Edit/Del” User Account
   c. Edit all accounts to match the following access privileges
      1) EXECUTIVE – refers to executive level managers in an organization

2) MANAGER – refers to 1st level managers or immediate supervisor in a department/branch/group

3) STAFF – refers to the staff or subordinate personnel of the manager/supervisor

4) SECRETARY – refers to the staff who receives and release documents for the organization. Commonly referred to receiving section.

5) SysAdmin - refers to the system administrator for the e-dokyu

4.