

# READ ME

- 1) Download the Directory “The\_Chaincoders”
  - a) It consists of an “./image” folder which already has 8 images in our dataset.
- 2) Prerequisites :
  - i) Jupyter Notebook
  - ii) cv2
  - iii) numpy
  - iv) matplotlib
  - v) Sklearn
- 3) Running the Python Notebook
  - a) The python notebook file is named as ‘Cookie\_Challenge\_THE\_CHAINCODERS.ipynb’. Run the file on the jupyter notebook.
  - b) The last cell in the notebook has function calls to all other functions above.
  - c) Image acquisition code is commented for testing purposes.
  - d) To read a particular image just change the value of the ‘i’ variable in the main cell. (it can be taken from the user also but in a real-time production environment it will be automated as it will read newly captured images).
  - e) Subsequent function calls are made to evaluate all parameters.
  - f) Minimum numbers of choco chips are taken as input parameters from the user.
  - g) Following is given as output (values+images)
    1. Diameter of the cookie.
    2. Number of chocolate chips present.
    3. Hex codes of top 3 colors in the cookie.
    4. Detecting damaged cookies, cracked or broken edges.