Selenium with OCR Technology for Image Verification With Text

Agenda for this Document: To discuss the verification of IMAGE in Selenium c# with the OCR technology.

What is OCR: Optical character recognition (OCR) is the mechanical or electronic conversion of images of typewritten or printed text into machine-encoded text.It is a common method of digitizing printed texts so that it can be electronically edited, searched, stored more compactly, displayed on-line, and used in machine processes.

Where and When OCR technology is required for Selenium:

When we are automating our application with Selenium and C# as a language. There might be some scenario where we need to verify images,In this type of situation tampering images won't give good result,and also Selenium c# is not that much compatible with **SIKULI** which does a decent job for Selenium JAVA in this kind of image processing/verification etc etc. There OCR technology comes in to the picture which serves the purpose well.

What we can Do with OCR:
We can extract text from the images and can verify the same from our Selenium C# application Under test.

HOW:
        We need to download the required image locally and perform the action in following two ways:

A. Using "https://www.newocr.com/" we can upload the image and can extract the text from the image.

B. Using "tesseract-ocr" we can achieve the purpose very well.

What is Tesseract-Ocr:

Tesseract is probably the most accurate open source OCR engine available. Combined with the Leptonica Image Processing Library it can read a wide variety of image formats and convert them to text in over 60 languages.
How: We need to install tesseract-ocr in our system and through cmd prompt we can extract text from the image.