



**SYMBIOSIS INSTITUTE OF TECHNOLOGY**

**DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY**

# **Software Testing and Quality Assurance**

## **Lab Assignment - 1**

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**BRANCH: CS (C4)**

Test Cases for Super Resolution using deep neural network project. (Super resolution is a technique to transform a low resolution image to high resolution image.)

#### Input

1. The image input file format; should be JPEG
2. The size of input file; should be <10MB
3. The size of the image; 32X32
4. The colour map of the image; should be grayscale image
5. If the file path is valid or not; should be valid
6. If the file is accessible; read access

#### Processing

7. If file can be displayed; should be compatible with the display device
8. If the image fits into display frame; should be perfect fit
9. If the featured extracted information; should not have missing values

#### Model Training

10. Kernel's life; should be running with proper allocated memory
11. Kernel's booted with the proper model specification; should have all the features weights and biases assigned successfully
12. If all dependencies are satisfied; should be pre-allocated
13. If model produces intended application output; should be high resolution 64X64
14. If data is distributed evenly; should be stratified
15. If the discriminator is able to discriminate or not; should be able to

#### Model Testing and Output

16. If the output image is able to store in the system; should have enough memory
17. If the output image is having missing pixel values or not; it should not
18. If the output image is successfully converted to grayscale image or not; it should
19. If the output image fits in the display frame; should be perfect fit
20. If the comparison between the input and output is significant; should be enlarged with no blurry edges.