**A17- one page report**

Final Title:**Design of system to generate photo realistic face images from textual description using GAN**

Domain: **Intelligent System Design and Development**

Category:**Application Based**

Abstract: **Deep Neural networks are currently capable of providing human level solutions to a variety of problems such as image recognition, speech recognition, machine translation, natural language processing, and many more. . Deep convolutional generative adversarial networks (DCGANs) have proven capable at generating diverse, photorealistic images of human faces, but it is difficult and often time-consuming to choose what kind of image these generative adversarial networks (GANs) produce. Tasks like mapping textual data to visual data (i.e. lower dimension to higher dimension) is a feat which is still not easily achievable even by experts. The challenge here is extracting every possible information from lower dimension data to generate comparatively higher dimension data. This work collaborates with GANs and Natural Language Processing (NLP) to come up with a model which will effectively translate human facial features from characters to pixels. In other words the model will generate realistic human faces given the description of the faces. We create a simple, intuitive web application through which users may write a description of a human face in plain text and generate photos that appear to match the given description.**