## **Computer Images**

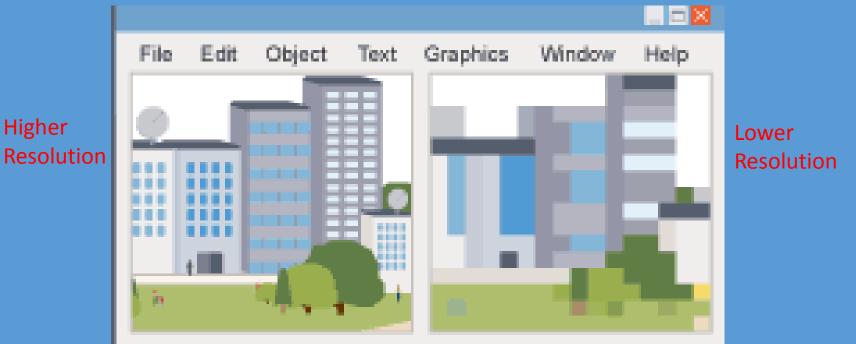
Nik Ivic and Will Speed

## **Colour Depth**

- The amount of bits available for colours in an image:
  - 1 bit = 2 colours (i.e. black and white)
  - 4 bits per colour = 16 shades of each colour, 4096 colours.
  - 8 bits per colour = 256 shades colours, 256<sup>3</sup> colours
- Computers and digital cameras use 24 bit images meaning that there are over 16 million possible colours per pixel

## Resolution

- A measure of pixel density, measured in dots per inch (dpi). It is the amount of pixels in 1 square inch. More pixels  $\rightarrow$  Better Resolution
  - E.g. 56 dpi = 56 x 56 = 3136 pixels per square inch



Higher

## Compression

- Used to reduce file sizes and change various attributes of an image file. Attributes include:
  - Dimensions
  - File Type
  - Resolution
  - Bit Depth
- Two types of image compression:
  - Lossy
  - Lossless
- Types of compressed image files:
  - PNG Lossless
  - JPEG Lossy
  - GIF Lossless