Problem1: Check for issues in the Bare PCB

* No breakage in tracks
* Distance between Tracks lesser than tolerable distance
* Distance between Solder pads lesser than tolerable distance
* Masking missing, copper visible on the track,

Problem2: Related to placement of components on PCB, like:

* is component present
* is component right
* is component soldered correctly
* is polarity of component right

**Input -** Raw Image  
**Expected Output -** Labelled Image (Labels – Error, Warning, Doubtful)

**Overall Flow:**

Raw Image 🡪 Image Recognition 🡪 Image Classification 🡪 Image Processing on Business Logic 🡪 Labelled Image

Approach to be used

* For Image Recognition – Supervised Learning

Pointers:

* Object Recognition