Introduction And Problem Statement

Count the number of supplies in the kitchen cabinet.

Concept Design/Proposed Methodology

Counting of the supplies boxes in the cabinet will be performed by tracking Multiple Objects Using OpenCV. The raspberry pi is known for its excellent results in usage for image processing. The supplies jars will be marked using Red, Green, Blue tapes or sheets which will be recognized by camera and using OpenCV image processing technique/library, jars will be counted based on colour detection.

For this purpose, following equipment will be necessary.

Project Budget

Component	Quantity	Price (PKR)
1) Raspberry Pi 2 Model B+	1	5500
2) Camera Module 5MP	1	2500
3) Memory Card	1	500
4) Adapter 5V	1	500
5) Adjustable camera holder mount	1	400
Total		9400

Objectives/ Goals

The main objective is to keep an eye on the available supplies and to get notified when any supply runs out. This way, user will keep updated and shortage of any supply can be prevented.