Software quality estimation is needed to predict the good quality of the programs or the software module. This dissertation represents that track and detection of potential software faults near the beginning, which is critical in many high assurance systems. On the other hand, creating such accurate quality-estimation design is challenging because the data with noise and unwanted data usually degrades the performance of the whole system or the model. After studying several research works in this area, we come across with two main problems. First is the noise and second which is the main problem is the parameter on which you can categorize the programs for the betterment.

So in connection with the problems we have established proper software measurement methods which have appropriate data collection, analysis and reporting requirements mechanism. The chances of noise are low as we have considered object oriented modules. It can be categorized by different accuracy measurement of software model like F-Measure, Odd Ratio and Power. We accept object oriented modularity as the dataset. The data used for the experimentation have class, object, inheritance and dynamic behavior. After that we categorized our framework for selecting the modularity from six different choices. The six different choices are 1-10, 11-20, 21-30, 31-40, 41-50 and > 50. For data qualification chi-square test is performed. With the help of chi-square test only selected modules are selected which is then pass for the further software metric analysis. This testing is based on the object oriented parameters like inheritance, class, reference and run time binding. It will provide us the probability distribution values. Then F- measure (FM), Power (PO) and Odd Ratio (OR) are applied for the quality analysis based on the metrics passed. Then we have applied random particle swarm optimization (PSO) for retrieving the optimized values. The results show a better framework which will be able to predict quality metrics.