**Problem Understanding**

After analyzing the scenario I understand that we need to design a system that recorded all of these functionalities.

Firstly, we store all types of trolley/baskets in our system according to their identification range and also store their total amount. And we store these baskets and allocate allocated in this way to allow for future growth of the “trolley fleet” if more are ordered to replace those which are lost or destroyed (asset numbers are never reused).

Then the system stores the type and allocated ID in an array (issued basket) of that trolley/basket when that basket/trolley is issued to the customer. And also store cash and another array that customers pay when obtaining a basket. And when the customer returned that specific trolley then our system store that trolley/basket in the returned\_basket array and also remove that basket record from the issued\_baket array and returned customer cash. So, we maintain our total availability of trolleys. With the help of this stored information, we were able to calculate our total loaned and not on a loan of the basket of each type.

Also, when the customer returned the basket, we need to ask from customer to rate this basket. For example, customers rate the basket 5-star, 4-star, and so on. Then make a list of that basket rating and store that basket type and allocated number and the review. So, we are able to feature or trolley/basket on the behalf of that star rating. That basket is most or least popular according to the customer star ratings.

In the end, we compare both lists (issued\_basket & returned\_basket) and make sure which trolley/basket we lost that day. And calculate the total of lost baskets. According to my opinion, we solve that problem with the help of this featured system.