Project Report

Schema Design :

1. Two extra schemas have been included in the system apart from *asset* and *performance* schema. *asset_type* and *operational_status* helps to
    a. Add and keep track of all the types and statuses of the assets.
    b. Update the corresponding type or status without affecting the asset database. Say if asset_type : T1 is outdated and needs to be updated but no changes required for the assets associated with it. Then user just have to update the description of T1 keeping the id same.
    Reduces the frequency of accessing the database.
    c. Also deleting a status or type will just made the asset_type and operatinal_sts field *null*.
2. In the asset schema the asset_ loc is a nested schema consisting of street no, city, pincode.

Multiple Options for delete:

As per requirement the user can select the mode to delete an asset.

1. Cascade Delete : if an asset is deleted then it's corresponding performance record will be deleted too.
2. Normal Delete : Only asset is deleted but it's performance metrics are still the db.

Benchmark for high failure rate:

The benchmark for the criteria is considered as the sum of **(mean+standerd deviation)** of the failure rates of all assets.

USER Database:

A user database is created with to keep track of the users and who are the super users. So that the sensitive resource informations' access can be restricted.