

## **Production Test Cases**

The purpose of this document is to discuss how can we extend our unit tests for production environment. Several points will be mentioned that we believe can fulfill that.

### **1) Strengthening Unit Tests for each Cleaning Function**

- Adding tests that assert behavior not just column existence (ex. Normalization correctness check)

### **2) Production-grade tests for fact table builder function**

- Adding complex boundary tests for the time window join
- Adding tests for the tie breaker of the overlapping maintenance events
- Adding more tests for breakdown flag assignment

### **3) Add integration tests (small end-to-end, local Spark)**

- At least 1 to 2 end-to-end tests for production
- A golden mini dataset can be used with malformed, missing & duplicated data