Abstract

Software reliability assessment had been a major issue among the researchers in the recent past. Two important characteristics to assess software reliability are MTBF (Mean time between failure) and number of errors. In this paper, we capture and extract workload and failure data from server logs of a web application named College Excel. Classify the workload data based on four parameters. Calculating the cumulative values of four workload parameters and error for 30 days we plot graphs and verify the relationship between failure and different workload parameters. We also calculate the reliability of the College Excel web application using Nelson model (one of the most widely used input domain reliability model) and MTBF (mean time between failure) using failure and different workload units.

References

Web Application Reliability Assessment using Error and Workload Data Obtained from Server Error and Access Logs


Index Terms

Computer Science  Web Services

Keywords

Reliability  Web Application  Error  Workload