

TECH BITS

Software Testing Metric

Software Testing Metric is defined as a quantitative measure that helps to estimate the progress, quality, and health of a software testing effort. A **Metric** defines in quantitative terms the degree to which a **system, system component, or process** possesses a given attribute. The ideal example to understand metrics would be a weekly mileage of a car compared to its ideal mileage recommended by the manufacturer. Test Metrics Glossary

- Rework Effort Ratio = (Actual rework efforts spent in that phase/ total actual efforts spent in that phase) X 100
- Requirement Creep = (Total number of requirements added/No of initial requirements)X100
- Schedule Variance = (Actual efforts – estimated efforts) / Estimated Efforts) X 100
- Cost of finding a defect in testing = (Total effort spent on testing/ defects found in testing)
- Schedule slippage = (Actual end date – Estimated end date) / (Planned End Date – Planned Start Date) X 100
- Passed Test Cases Percentage = (Number of Passed Tests/Total number of tests executed) X 100
- Failed Test Cases Percentage = (Number of Failed Tests/Total number of tests executed) X 100
- Blocked Test Cases Percentage = (Number of Blocked Tests/Total number of tests executed) X 100
- Fixed Defects Percentage = (Defects Fixed/Defects Reported) X 100
- Accepted Defects Percentage = (Defects Accepted as Valid by Dev Team /Total Defects Reported) X 100
- Defects Deferred Percentage = (Defects deferred for future releases /Total Defects Reported) X 100
- Critical Defects Percentage = (Critical Defects / Total Defects Reported) X 100
- Average time for a development team to repair defects = (Total time taken for bugfixes/Number of bugs)
- Number of tests run per time period = Number of tests run/Total time
- Test design efficiency = Number of tests designed /Total time
- Test review efficiency = Number of tests reviewed /Total time
- Bug find rate or Number of defects per test hour = Total number of defects/Total number of test hours

Facebook picks 6 winners for Ethics in AI research awards in India: The project winners, focused on areas like governance, cultural diversity and operationalising ethics. The project was open to academic institutions, think tanks, and research organisations registered and operational in India

Bengaluru to get AI-powered traffic signals soon: The new AI cameras will study traffic density and decide on how much time to allow vehicles to clear a signal. This will save fuel and give motorists an idea about when they can move.

Google announces a new AI research centre in India: The centre coming up in Bengaluru, called Google Research India, will focus on advancing fundamental computer science research to develop tools that can be used by government and private entities.

Google Assistant to be available to Indian users without internet: The virtual assistant will be available to people who have the most basic cellphone with no internet access. A 24x7 telephone line on Vodafone-Idea telecom networks could be dialled by users to access the service. Google has been testing the line in Lucknow and Kanpur.

IIT-Kharagpur students build home-rechargeable three-wheeler: A team of students and professors at the Indian Institute of Technology, Kharagpur has built 'Deshla', an electric three-wheeler that can be charged at home

Maharashtra govt ties-up with Zipline to deliver medicines via drones: The initiative will be supported through a grant from Serum Institute of India (SII). Zipline will establish about 10 distribution centres across Maharashtra in phases.

MIT researchers create programmable ink to let objects change colours when exposed to ultraviolet light: The 'PhotoChromleon Ink' uses a mix of photochromic dyes that can be sprayed or painted onto the surface of any object, including shoes, cars or phone cases. The process can take about 15-40 minutes, depending on the shape of the object.

40% Indians fear losing job for controversial posts online: According to a study by McAfee, 40% Indians agreed that they could be fired from their jobs for controversial content on their social media. About 25.3% admitted they did not know how to change the privacy settings of their profiles, while over half the users in India have at least one dormant social media account.

YouTube awards 8 Indian creators with YouTube Learning Fund: The fund is supporting the development of high-quality learning content, covering topics like English language training, environmental science, political science, among others.