

Assignment 1

1. User Benchmark

What it tests?

UserBenchmark is a free benchmarking tool that measures the performance of your PC's CPU, GPU, SSD, HDD, RAM, and USB drives.

How it tests?

It runs short, automated performance tests on each component and compares the results against a large online database of user-submitted results. It focuses on real-world tasks like gaming, multitasking, and workstation workloads.

What results it shows?

- Individual component scores (e.g., CPU Effective Speed, GPU Bench)
- Percentile rankings compared to similar systems
- A summary like "Gaming/Desktop/Workstation performance in percentiles"
- Suggestions for performance improvement

2. 3DMark

What it tests?

3DMark is a professional benchmarking tool primarily used to test GPU and CPU performance, especially in gaming and 3D rendering.

How it tests?

It uses graphically intensive test scenes and simulations to push the hardware to its limits. It includes different test suites like Time Spy, Fire Strike, and Night Raid, each designed for specific performance levels and system types (e.g. high-end gaming PCs, laptops, etc.).

What results it shows?

- A total score combining CPU and GPU performance
- Separate graphics and CPU scores
- Frame rates during test scenes
- Comparisons to other systems with similar hardware