**Digital Computers – Benchmarks**

Project by Lethal Company Team:

* Boata Nicola Karina Alexandra
* Bechir Rares-Mihai
* Serbulescu Adela-Elena

***Assignment 1 – Introduction to Benchmarks***

1. **UserBenchmark:**

Functionality: *UserBenchmark* is a benchmarking tool primarily focused on assessing the performance of various hardware components within a computer system, including CPUs, GPUs, SSDs, and RAM modules.

Testing: *UserBenchmark* conducts a series of real-world tests to evaluate the performance of each component. These tests include tasks such as data compression, image editing, gaming simulations, and file transfer speeds. It also takes into account user-submitted data to provide a broader perspective on hardware performance across different configurations.

Results: *UserBenchmark* generates a comprehensive report detailing the performance of each hardware component tested. It assigns a percentage-based score to each component, indicating its performance relative to other similar components in its database. Additionally, *UserBenchmark* provides insights into the strengths and weaknesses of each component, highlighting areas where improvements can be made. Users can compare their hardware's performance with others and identify potential bottlenecks in their system.

Overall, *UserBenchmark* offers users a straightforward way to assess the performance of their hardware components and identify areas for improvement, making it a popular choice among PC enthusiasts and casual users alike.

1. **3DMark:**

Functionality: *3DMark* is a benchmarking tool specifically focused on evaluating the graphical performance of computers and gaming systems.

Testing: *3DMark* uses a series of graphical tests, including rendering scenes with complex lighting and physics simulations, to stress-test the GPU and measure its performance in real-world gaming scenarios.

Results: *3DMark* provides a comprehensive overview of GPU performance, including frame rates, graphical fidelity, and overall responsiveness. It offers different benchmarking modes tailored to different hardware configurations, such as gaming laptops, high-end gaming PCs, and even virtual reality systems.

Overall, *3DMark* offers a comprehensive overview of GPU performance, helping users evaluate their systems and compare them to others with similar hardware configurations.