

PROJECT TOOLS:

Python 3: programming Language

Google Colab : A cloud-based Jupyter notebook environment. Ideal for data analysis, machine learning projects, and collaboration. Provides free GPU access for accelerated computing.

ELK Stack (Elasticsearch, Logstash, Kibana) : A powerful log management and analysis tool. Elasticsearch stores and indexes data, Logstash processes and ingests data, and Kibana provides visualization and dashboard capabilities.

Kibana : A data visualization tool for the ELK Stack. Allows users to create interactive charts, graphs, and dashboards. Provides insights and analytics capabilities for log data stored in Elasticsearch.

Wireshark : A network protocol analyzer. Used for network troubleshooting, analysis, software and protocol development. Captures and interactively browses the traffic running on a computer network.

Apache : A widely-used open-source web server software. Known for its robustness, flexibility, and security. Supports various features like load balancing, URL redirection, and authentication.

MongoDB : A NoSQL database. Known for its high performance, high availability, and easy scalability. Stores data in flexible, JSON-like documents.

GitHub : A web-based platform for version control using Git. Enables collaborative coding, issue tracking, and code review. Provides integration with CI/CD tools and project management features.

Jira : A project management tool used for issue and bug tracking. Widely used in agile development for sprint planning, tracking progress, and managing tasks and workflows.

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Dataset: A file that contains all the data .