

Xerris Bootcamp Series

AWS Developer Bootcamp

Who is Xerris?

- We are experts in cloud migration and digital transformation and offer specialized services to guide your business from initial vision, through to strategy creation, roadmaps & execution.
- We work with clients who have a mandate to move to the cloud and claim their stake in the digital economy. Whether our clients are committed to AWS, GCP, Azure, or a private cloud, our core focus keeps us cloud agnostic.
- We use agile methods and open source technology to deliver optimal value for our clients while setting them up for long-term success.



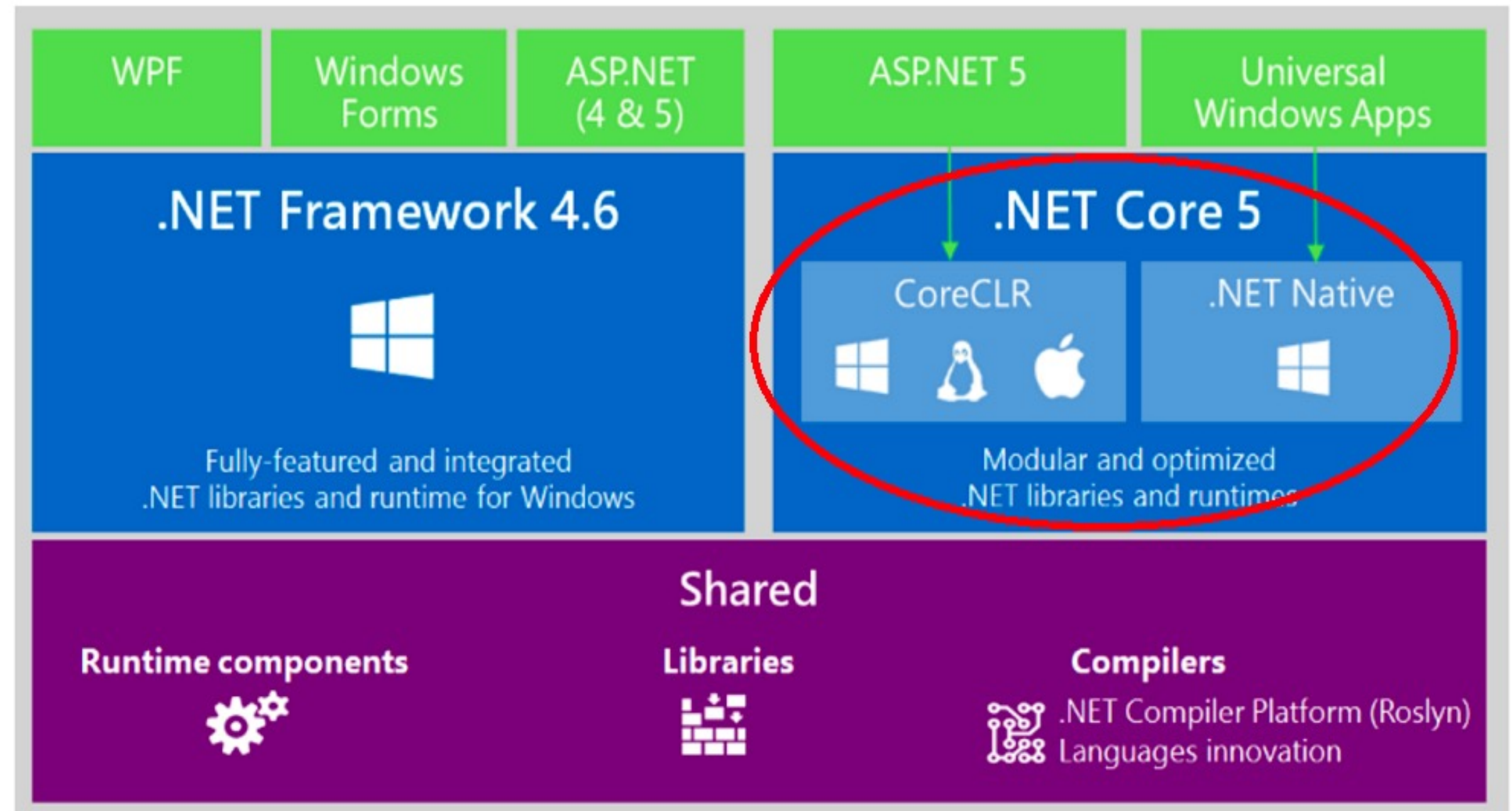
XFactor AWS Developer Bootcamp Roadmap

The program broadly focuses on the following skill areas:

- 01 – Welcome to the Cloud
- 02 – Introduction to Microservices & DynamoDB
- 03 – Infrastructure As Code
- 04 – Introduction to SQS & SNS
- 05 – Introduction to Test Automation
- 06 – Test Automation with Mocks
 - .1 – Test-Driven Development
- 07 – Student Project

DotNet Core Development

- DotNet Core is an open-source development platform for Windows, Linux and Mac OS.



Automated Testing & Code Quality

Automated testing is key to agile project delivery

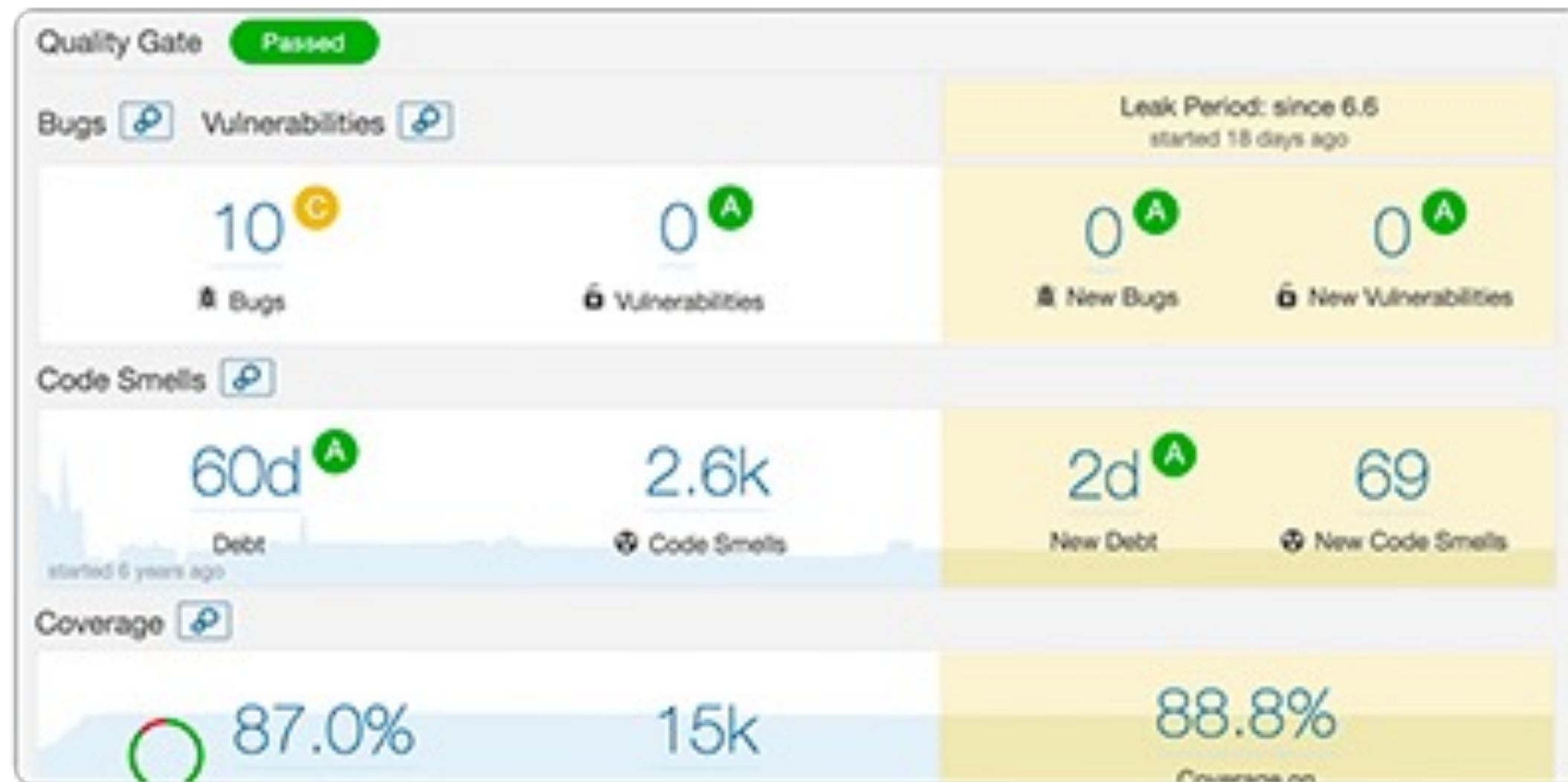
- Promotes a more modular approach to writing software
- Improved code quality
- Improved software quality

Tools

- Specflow – open-source library for developing functional acceptance tests
- XUnit – open-source library for developing component level unit tests
- Moq – open-source library for dependency injection mocking
- Fluent Assertions – open-source library to help improve test readability
- Xerris Test Automation module – Template to improve developer productivity
- <https://agilemanifesto.org/>
- Focuses on adding business value to the customers
- Focuses on automated unit testing and code quality
- Early and predictable software delivery
- Predictable Costs and Schedule

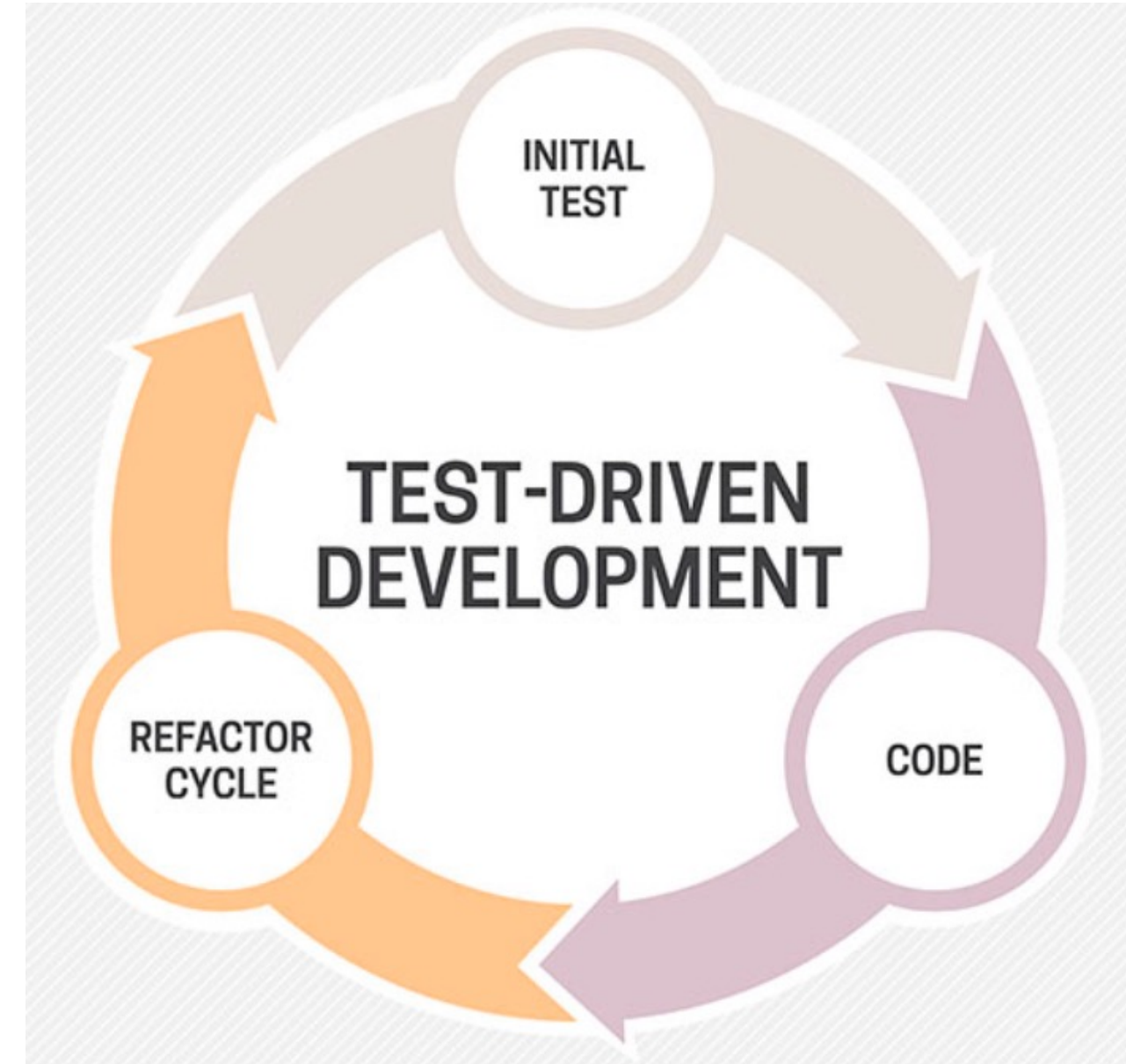
Automated Testing & Code Quality

- SonarQube is a static code analysis tool that measures your code quality



Test Driven Development (TDD)

- Test-driven development (TDD) is a **development** technique where you must first write a **test** that fails before you write new functional code.
- TDD is being quickly adopted by agile software developers for **development** of application source code and is even being adopted by Agile DBAs for database **development**.



Infrastructure As Code (IaC)

- IaC is writing software to provision cloud infrastructure to run a business' workloads in the cloud.

AWS CDK (Cloud Developer Kit)

- Software development framework for defining AWS resources and provisioning it through CloudFormation.
- Available in Typescript, Python, Java, C#
- Terraform
- Cloud agnostic framework for creating cloud infrastructure
- Serverless
- YAML based cloud agnostic framework for creating cloud infrastructure

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Terraform (Hashicorp)

- Terraform is a tool for building, changing and versioning infrastructure.
- Supports most major cloud providers, AWS, GCP, Azure, Oracle...
- Uses the declarative approach to Infrastructure As Code.
- Is Open source with a great online community for support.
- **Xerris** is a partner of Hashicorp.

Xerris Academy

What you will need

01 .Net Core

.NET Core is a general-purpose development platform maintained by Microsoft and the .NET community. It is cross-platform, supporting Windows, macOS and Linux.

02 AWS Account (free tier)

The AWS Free Tier provides customers the ability to explore AWS services free of charge up to specified limits.

03 Git – (source control versioning)

A free version control system for tracking changes in computer files and coordinating work on those files among multiple people.

04 Command Line (bash/PowerShell)

A command-line interface or command language is a means of interacting with a computer program in the form of successive lines of text.