

Xerris Bootcamp Series

# AWS for Developers



ACCOLITE DIGITAL  
Transforming The Future, Now



## Who is Xerris

We are experts in cloud migration and digital transformation and offer specialized services to guide your business from initial vision to strategy creation, roadmaps and execution.

We work with clients with a mandate to move to the cloud and claim their stake in the digital economy. Whether our clients are committed to AWS, Azure, GCP, 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.



Accelerating to 2025



# AWS Developer Bootcamp

## Roadmap

The program broadly focused on the following skill areas:

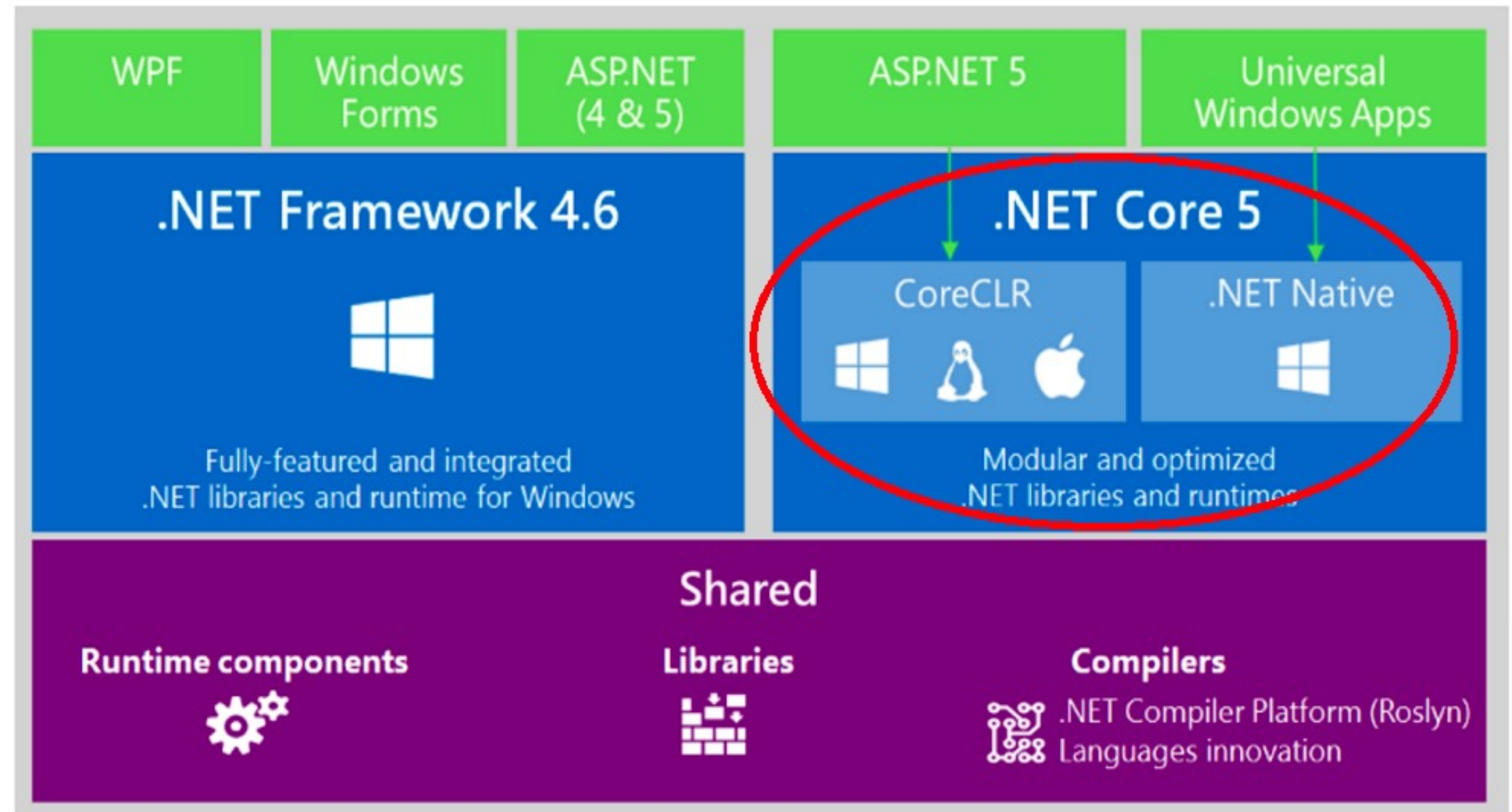
1. Welcome to the Cloud
2. Introduction to Microservices
3. Introduction to AWS DynamoDB
4. Infrastructure As Code (IaC)
5. Introduction to AWS SQS
6. Introduction to AWS SNS
7. Introduction to Test Automation
8. Test Automation with Mocks
9. Student Project





# DotNet Core Development

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



# Automated Testing and Code Quality

- Automated testing crucial to agile project delivery
- Promotes a more modular approach to writing software
- Improved code quality
- Improved software quality

## Tools

- Specflow/Cucumber – 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 Module – Template to improve developer productivity.

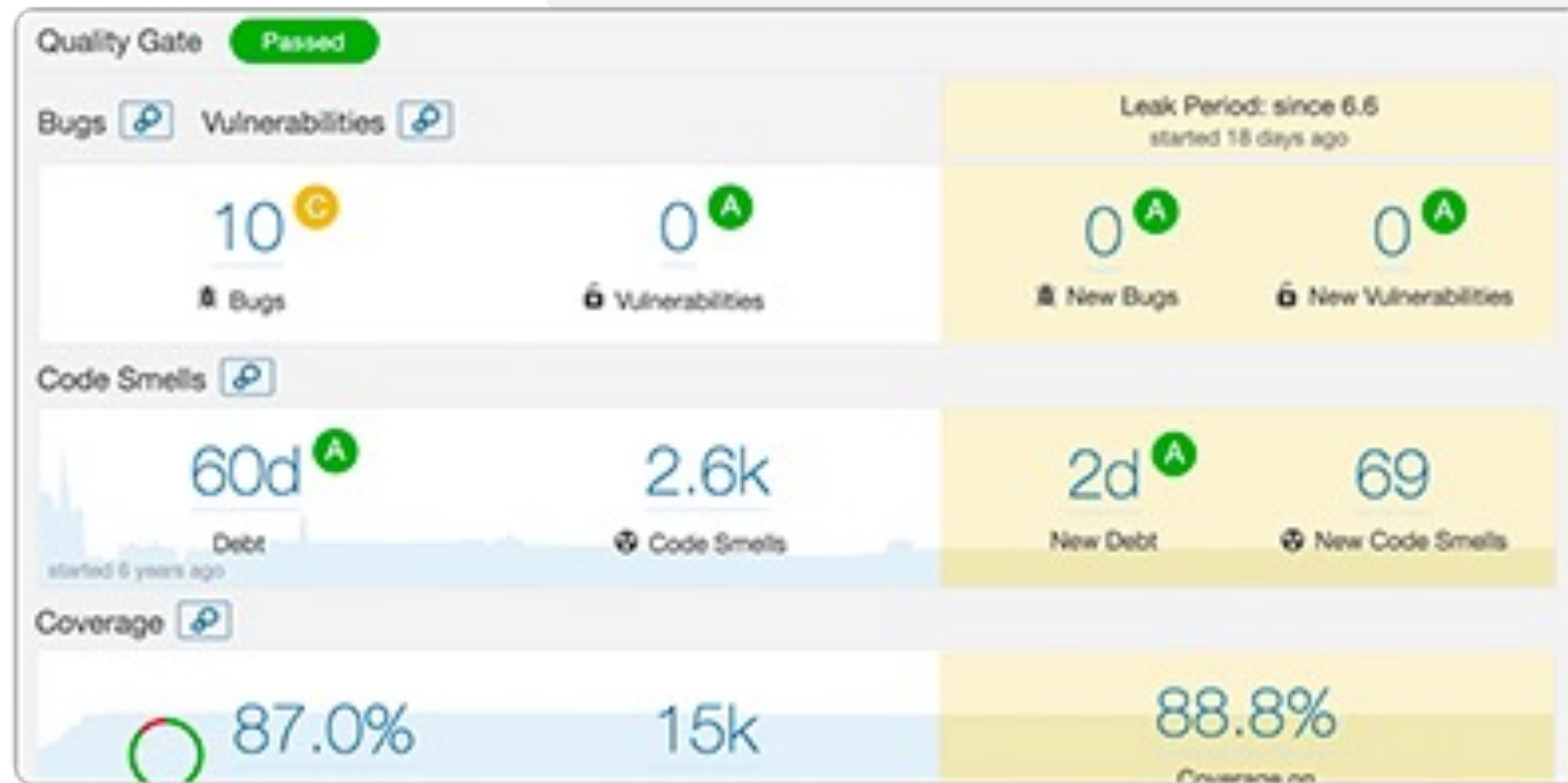
<https://agilemanifesto.org/>

- Focuses on adding business value to the customers.
- Focused on test automation and code quality, and predictable software delivery.
- Predictable costs and schedule.



## Automated Testing and Code Quality

**SonarQube** – a static code analysis tool that measures your code quality.



# Software Development Lifecycle (SDLC)

Agile SCLC focuses on collaborative decision-making, customer satisfaction and development over short repeatable cycles.

**Requirements / Ideation** – Work with customers to understand their business objectives, define goals, document requirements, and prioritize tasks.

**Development** – Develop a solution from UX design, development and test automation.

**Testing** – The cornerstone of agile, focusing on repeatable tests, code quality, bug resolution, and demos and pilot runs.

**Deployment** – Automated deployments through every step, ensuring the software is always production-ready.

**Operations** – Ability to support the solution in a production setting.



# 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)

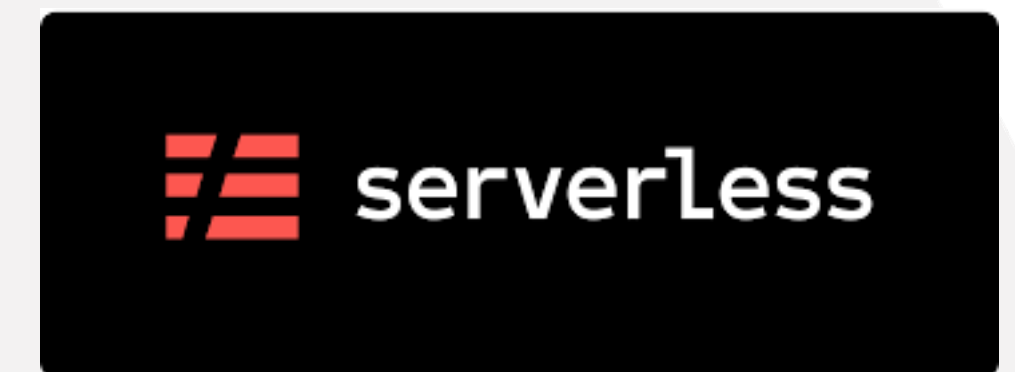
Software development framework for defining AWS resources and provisioning them through CloudFormation.  
Available in Typescript, Python, Java, C#

## Terraform

Cloud agnostic framework for creating cloud infrastructure.

## Serverless

YAML-based solution for cloud infrastructure.





# Infrastructure As Code (IaC)

## 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.
- Open-source with a great online community for support.
- **Xerris** is a partner of Hashicorp.



# AWS Developer Bootcamp

## What you 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.

