Certified Software Developer Advance (C#)

GSDC
Global Skill Development Council
CSDA
C#
CERTIFIED

By obtaining GSDC Certifications, both current and aspiring software professionals can enhance their proficiency as members of software development teams and write sustainable code.

Certified Software Developer Advance (C#)

ABOUT CERTIFICATION

. Possessing a GSDC certificate enables individuals to apply a full-stack approach to actual software development projects.

C# is a highly versatile programming language that serves as a Swiss Army Knife in software development. It is designed to support various software development types, including web, mobile, and app development, while also being simple to learn. C# allows developers to create .NET applications that can be easily deployed across different platforms, including Windows, Linux, Mac, and cloud-based environments, as well as in containers.

OBJECTIVES

1. To know the working understanding of software development.
2. To know the tools and best practices in software development.
3. To enhance your programming and technical skills.
4. How to write error-free code.
5. How to test and debug software and web application.
6. Use of the latest tools and concepts in application development.

Our Accreditation:

COURSE SYLLABUS

1. key Topics
- Delegates and events
- Delegates
- Events
- Anonymous types
- Tuples
- The Tuple class
- Value tuples
- Pattern matching
- The is expression
- The switch expression
- Regular expressions
- Overview
- Matching input text
- Finding substrings
- Replacing parts of a text
- Extension methods

2. Resource Management
- Garbage collection
- Finalizers
- The IDisposable interface
- The using statement
- Platform invoke
- Unsafe code

3. Lambdas, LINQ, and Functional Programming
- Functional programming
- Functions as first-class citizens
- Lambda expressions
- LINQ
- Standard query operators
- Query syntax
- Currying
- Closures
- Monoids
- Monads

4. Reflection and Dynamic Programming
- Understanding reflection
- Dynamically loading assemblies
- Understanding late binding
- Using the dynamic type
- Attributes
- System attributes
- User-defined attributes
- How to use attributes?
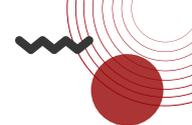- Attribute targets
- Attribute targets
- Assembly attributes
- Attributes in reflection

5. Multithreading and Asynchronous Programming
- What is a thread?
- Creating threads in .NET
- Using the ThreadPool class
- Understanding synchronization primitives
- The task paradigm
- Synchronous implementations of asynchronous methods
- Occasionally asynchronous methods
- Breaking the task chain – blocking the thread
- Manually creating a task
- Long-running tasks
- Breaking the task chain – fire and forget
- Task and exceptions
- Canceling a task
- Monitoring the progress of a task
- Parallelizing tasks
- Signaling tasks with the TaskCompletionSource object
- Synchronization context

6. Unit Testing
- What is unit testing?
- What are Microsoft tools for unit testing?
- Creating a C# unit testing project
- Writing unit tests
- Analyzing code coverage
- The anatomy of a test
- Writing data-driven unit tests
- Data from attributes
- Dynamic data
- Data from external sources

GSDC Technical Advisory Board :

The GSDC is the leading certification association which brings together innovative organizations and founding thought-leaders as Technical Advisors from over 40 countries to design curriculum on Blockchain, Devops, Six Sigma & Agile Certifications.

Our Future Information
Target Audience

GSDC Certification is for all those who want to prove they can apply their core Java developer skills into real-life projects.

Examples of typical job titles with 3-5 years of experience:

- Senior Software Developer
- Senior Software Engineer
- Senior Web Developer
- Senior Android Developer
- Senior Front-end Developer
- Senior Full-Stack Developer

Find out more online at
www.gsdcouncil.org