Course Outline

PRO: Designing and Developing Web-Based Applications by Using the Microsoft C#.NET Framework
Contents

1. Course Objective
2. Pre-Assessment
3. Exercises, Quizzes, Flashcards & Glossary
   Number of Questions
4. Expert Instructor-Led Training
5. ADA Compliant & JAWS Compatible Platform
6. State of the Art Educator Tools
7. Award Winning Learning Platform (LMS)
8. Chapter & Lessons
   Syllabus
   Chapter 1: Envisioning and Designing an Application
   Chapter 2: Designing and Developing a User Interface
   Chapter 3: Designing and Developing a Component
   Chapter 4: Designing and Developing an Application Framework
   Chapter 5: Testing and Stabilizing an Application
   Chapter 6: Deploying and Supporting an Application
   Videos and How To
9. Practice Test
   Here’s what you get
   Features
10. Post-Assessment
1. Course Objective

The Microsoft Designing and Developing Web-Based Applications by Using the Microsoft .NET Framework certification is an industry recognized credential. The certification is proof of a person's competence across a spectrum of skills including Web-based application, ASP .NET, .Net Framework.

2. Pre-Assessment

Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

3. Exercises

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.

4. Quizzes

www.ucertify.com
Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.

5. **Expert Instructor-Led Training**

uCertify uses the content from the finest publishers and only the IT industry’s finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

6. **ADA Compliant & JAWS Compatible Platform**

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

www.ucertify.com
7. **State of the Art Educator Tools**

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assignments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

8. **Award Winning Learning Platform (LMS)**

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology’s finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 5 years:

- **2014**
  1. Best Postsecondary Learning Solution

- **2015**
  1. Best Education Solution
  2. Best Virtual Learning Solution
  3. Best Student Assessment Solution
  4. Best Postsecondary Learning Solution
  5. Best Career and Workforce Readiness Solution
  6. Best Instructional Solution in Other Curriculum Areas
  7. Best Corporate Learning/Workforce Development Solution

- **2016**
  1. Best Virtual Learning Solution
  2. Best Education Cloud-based Solution
9. **Chapter & Lessons**

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

**Syllabus**

Chapter 1: Envisioning and Designing an Application
• Evaluate the technical feasibility of an application by existing solutions for similar business problems.

• Create a proof-of-concept prototype. Evaluate the proposed solution will address their needs.

• Evaluate the technical specifications for an application. Recommend a UML diagrams. Suggest component type and layer.

• Evaluate the design of a database. Recommend a procedure that are required for an application.

• Evaluate the logical design of an application. Evaluate the logical design for data integrity.

• Evaluate the physical design of an application. Evaluate the physical design for data integrity.

Chapter 2: Designing and Developing a User Interface

• Choose an appropriate layout for the visual interface and the user experience throughout the application.

• Evaluate a strategy for implementing a common language rating systems, technologies, and browser types.

• Choose an appropriate control based on design specifications and include screen size and browser type and version.

• Choose an appropriate data validation method at check, such as a message box or color, is required.

• Choose appropriate user assistance and application status feedback mechanisms.
• Choose an appropriate mechanism to deliver multi...g types. Design a multimedia delivery mechanism.

Chapter 3: Designing and Developing a Component

• Establish the required characteristics of a comp...e located. Decide which type of object to build.

• Create the high-level design of a component. Es...nce, performance vs. maintainability, and so on.

• Develop the public API of a component. Decide t...es. Decide whether to require constructor input.

• Develop the features of a component. Decide whe...the base class, abstract class, or sealed class.

• Develop an exception handling mechanism. Decide... exception; catching and terminating, and so on.

• Develop the data access and data handling featur...e the data handling requirements of a component.

• Develop a component to include profiling require...component after analyzing the profiling results.

Chapter 4: Designing and Developing an Application Framework

• Consume a reusable software component. Identify...ied component that is based on the requirements.

• Choose an appropriate exception handling mechani...nism. Design a new exception handling technique.
- Choose an appropriate implementation approach for... Choose an appropriate decision flow structure.

- Choose an appropriate event logging method for the logging levels based on severity and priority.

- Monitor specific characteristics or aspects of a method from the available monitoring mechanisms.

- Evaluate the application configuration architecture. Choose when to use ASP.NET Administrative tools.

Chapter 5: Testing and Stabilizing an Application

- Perform a code review.

- Evaluate the testing strategy. Create the unit...gy. Evaluate the test environment specification.

- Design a unit test. Describe the testing scenario. Decide the type of assertion tests to conduct.

- Perform integration testing. Determine if the test interactions and dependencies. Verify results.

- Resolve a bug. Investigate a reported bug. Reproduce cost and timeline for fixing the bug. Fix a bug.

Chapter 6: Deploying and Supporting an Application

- Evaluate the performance of an application that...s. Track page response times. Track logon times.

- Analyze the data received when monitoring an app... when to use ASP.NET 2.0 Health
Monitoring APIs.

- Evaluate the deployment plan. Identify components... Identify scripting requirements for deployment.

- Create an application flow-logic diagram. Evaluate complexity of interactions with other components.

- Validate the production configuration environment...ing settings. Verify the deployment environment.

10. 🌐 Practice Test

uCertify provides full length practice tests. These tests closely follow the exam objectives and are designed to simulate real exam conditions. Each course has a number of test sets consisting of hundreds of items to ensure that learners are prepared for the certification exam.

Here's what you get

- **13** PRE-ASSESSMENTS QUESTIONS
- **6** FULL LENGTH TESTS
- **44** POST-ASSESSMENTS QUESTIONS

Features

Full Remediation
Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.

**Unlimited Practice**

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.

**Learn, Test and Review Mode**

Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.

11. 📚 Post-Assessment

After completion of the uCertify course Post-Assessments are given to students and often used in conjunction with a Pre-Assessment to measure their achievement and the effectiveness of the exam.