Certified Associate JavaScript Programmer

Exam JSA-41-01

Table of contents

Chapter 1: Classless objects

- Create individual objects
- Explain and use object properties
- Compare and contrast dot and bracket notations
- Test property existence and perform property enumeration
- Compare and contrast objects
- Implement object copying mechanisms
- Explain and implement methods in code
- Explain and implement getters and setters
- Organize and configure objects and properties
- Demonstrate different ways to create classless objects
- Explain and apply the concept of prototypes

Chapter 2: Classes and class-based approach

- Design classes and implement class declarations
- Create objects from classes
- Explain and use class properties
- Create and implement getters and setters
- Explain and apply the concept of inheritance
- Explain and apply static members in code
- Compare and contrast classes and constructors

Chapter 3: Built-in objects

- Explain and use the Number constructor
- Explain and use the String constructor
- Explain and use the Date constructor
- Describe and implement the concept of arrays
- Explain and implement advanced array methods
- Explain, implement, and process Set data type collections
- Explain, implement, and process Map data type collections
- Implement objects as data structures
- Use the JSON object to process data
- Use the Math object to perform mathematical operations
- Explain and apply the concept of regular expressions
- Explain and implement the concept of extending built-in types

Chapter 4: Advanced functions

- Organize and implement extended function parameter handling
- Explain and use closures and IIFEs
- Implement the mechanism for call forwarding
- Implement the mechanism for decorating functions
- Explain, create, and implement generators and iterators in code
- Explain, organize, and handle asynchronous events using callback functions
- Explain and apply the concept of promises
- Explain and apply advanced promise chaining techniques
- Use async and await to handle promises
- Understand and implement asynchronous handling of network requests