

Macromedia Flash 2004 Developer Certification Examination Specification

Introduction

This examination is based upon the most critical job activities a Macromedia Flash MX 2004 Developer performs. The skills and knowledge certified by this examination represent a professional level of expertise where a certified individual can:

- Identify requirements and apply Flash MX 2004 technology in designing, coding, integrating, testing, troubleshooting and implementing solutions.

The test specification is intended to address the knowledge and skill areas that demonstrate competency as a Macromedia Flash MX 2004 developer. The basic knowledge and skills required at this level should include all of the following areas and objective components below. The knowledge level can be defined as having the following suggested prerequisites or equivalent professional experience:

- One to two years of object-oriented software development and/or scripting experience
- One to two years of involvement in web design, production, and graphics creation
- One to two years experience with Macromedia Flash MX or later
- Six months to one year of HTML and JavaScript.
- Six months experience with database interaction using Macromedia Flash MX or later.
- Six months experience with server architecture and/or streaming technologies with Macromedia Flash 2004.

These training courses will assist in exam preparation:

- Flash MX 2004 Application Development
- Flash MX 2004 Advanced Application Development

The skills and knowledge measured by this examination are derived from an understanding of the jobs of current Macromedia Flash MX developers. A team of highly qualified Macromedia Flash MX development experts defined the test content and wrote the test items.

Note: This examination blueprint includes weighting, test objectives, and example content. Example topics and concepts are included to clarify the test objectives; they should not be construed as a comprehensive listing of all of the content of this examination.

The table below lists the domains measured by this examination and the extent to which they are represented.

Domain	% of Examination
1.0 Macromedia Flash Concepts	15%
2.0 Requirements Definition - Environment	5%
3.0 Design and Coding	70%
4.0 Solution Implementation, Testing, and Deployment	10%
Total	100.00%

Response Limits

The examinee selects, from two (2) or more response options, the option(s) that best completes the statement or answers the question. Distracters or wrong answers are response options that examinees with incomplete knowledge or skill would likely choose, but are generally plausible responses fitting into the content area defined by the test objective.

Test item formats used in this examination are:

Multiple-choice: The examinee selects one option that best answers the question or completes a statement.

Multiple-response: The examinee selects more than one option that best answers the question or completes a statement. The question will state how many options are correct, i.e. – (Choose two).

Sample Directions: Read the statement or question and from the response options, select only the option(s) that represent the most correct or best answer(s) given the information provided.

Domain 1.0 Macromedia Flash Fundamentals

1.1 Recognize basic concepts of Macromedia Flash 2004 object orientation and structure of Macromedia Flash 2004 movies.

Content may include the following:

A. Identify basic interface and structure of Macromedia Flash 2004 movies.

- Libraries
- Timelines
- Buttons
- MovieClips
- Text
- Symbols and instances
- Keyframes
- Sound
- Components
- Screens
- Projects
- Behaviors

B. Identify effective hierarchical and functional structure of Macromedia Flash 2004 movies.

- Targeting
- Loading movies into both targets and levels
- Using dot syntax notation
- Where to place ActionScript

Domain 2.0 Requirements Discovery and Definition

2.1 Identify Macromedia Flash 2004 environment requirements needed to implement best practice solutions.

Content may include the following:

- When to build and use classes
- Sizing and performance factors
- Designing for different Flash Player versions
- Developing efficient and compact movies
- Determining best way to connect to remote data
- Following usability and accessibility best practices
- Integrating Macromedia Flash content to work with HTML and/or JavaScript and VBScript

Domain 3.0 Design and Coding

3.1 Identify basic ActionScript concepts and their application.

Content may include the following:

- Scoping variables
- Dynamic evaluation of variables
- Recognizing and applying Operators
- Capabilities of ActionScript
- Creating efficient modular and reusable code
- Using functions, control structures and includes
- Using MovieClip properties, depth, methods (drawing API), and events

3.2 Identify correct usage of object oriented programming with ActionScript.

Content may include the following:

- Defining classes
- Using built-in classes
- Creating components
- Identify methods and properties of objects
- Inheriting and extending classes
- Typing variables
- Using Getter and Setter methods
- Applying the Flash object model using event handler and Listeners

3.3 Identify Core Classes and how they are used in ActionScript.

Content may include the following core classes.

- Array
- Boolean
- Date
- Math
- Number
- String
- TextField
- MovieClip
- LoadVars
- Color
- XML
- Error
- SharedObject

3.4 Identify Flash UI Components and how they are used in ActionScript.

Content may include the following:

- Accordion
- Alert
- Button
- CheckBox
- ComboBox
- DataGrid
- DataHolder
- DateChooser
- DateField
- Label
- List
- Loader
- MediaController
- MediaDisplay
- MediaPlayer
- Menu
- MenuBar
- NumericStepper
- PopUpManager
- ProgressBar
- RadioButton
- RadioButtonGroup
- ScrollBar

- ScrollPane
- TextArea
- TextInput
- Tree
- Window

3.5 Identify Flash player and browser (host application) interaction and how they work.

Content may include the following:

- Communicating to the browser with fscommand
- Passing variables to Flash through the object and embed query string

3.6 Identify how to integrate your Flash 2004 movie with dynamic data.

Content may include the following:

Integrating with the following:

- WebService
- WebServiceConnector
- XML
- XMLConnector
- LoadVars
- Flash Remoting
- DataSet
- Binding
- XupdateResolver
- RDBMSResolver
- DeltaPacket

Domain 4.0 Solution Implementation, Testing, and Deployment

4.1 Identify methods to test and implement a Flash 2004 solution.

Content may include the following:

- Isolate errors
- Using Try and Catch
- Applying Bandwidth Profiler
- Trace
- For in Loops