# **Topics for Final Review**

### **Chapters**

- 7. Multiple Forms, Standard Modules, and Menus
- 8. Arrays, Timers, and More
- 9. Files, Printing, and Structures
- 10. Working with Databases
- 11. Developing Web Applications
- 12. Classes, Collections, and Scrollable Controls

#### **Forms**

Multiple Forms

Form Events and Handlers

Me keyword

Modal vs. Modeless Forms

### **Modules**

Organizing Procedures and functions into Modules

Public and Private procedures

Global Scope

Global Variables

Module Scope

Main Procedure

Startup object

Standard Module

### Menus

Menu Designer

Menu System

Menu Toolbox items

MenuStrip Control

StatusStrip Control (Status Bar)

Tool Strip

Context menus

Adding menus to forms

Menu Events and Handlers

Shortcuts

Checked Menu commands

Submenus

Separator Bars

Anchoring and Docking Controls

## **Object Oriented Programming**

Arrays and array processing

Multi-dimensional arrays

Array Bound Checking

Working with For and For-Each Loops

Random Numbers

Array algorithms (finding minimum, maximum, average, sorting, binary search)

Dynamically Resizing Arrays

Passing an Array as an argument

Returning an Arrays from a Function

ByVal and ByRef Arguments

Collections

Access Specifiers - Public, Private, Protected

Object Instantiation

Inheritance

Base and Derived Classes

Overriding Properties and Methods

### Base and Derived Class Constructors

### **Event Driven Programming**

Form Events and Handlers

Menu Events and Handlers

Splash Screens

Timer Control

Scrollable Controls

Scroll Bars and Track Bars

### **Databases**

DBMS and RDBMS

SQL

Databases, Tables, Fields (Columns), Records (Rows)

**SQL** Data Types

Primary and Foreign Keys

DataGridView Control

**Data-Bound Controls** 

**Data Sources** 

Binding Source

Table Adapters

**Datasets** 

## **Web Applications**

HTML Language, HTML Tags and HTML Controls

Cascading Style Sheets (CSS)

HTTP Protocol

Client-Server Architecture

Request-Response Model

ASP.NET, IIS

Web Forms

Web Server Controls

Types of Web Sites

Codebehind

Web.Config

Event Handling in Web Forms