

Topics for Midterm Review

Hardware and Software Overview

- Computer Hardware
 - Central Processing Unit (CPU)
 - Primary Storage
 - Main Memory or Internal Memory (RAM)
 - Secondary Storage
 - Hard Disk Drives (HDD)
 - Optical Drives (CD, DVD, BD)
 - Flash Memory (USB Flash drives or keys)
 - Floppy Disks
 - Magnetic Tape
 - Volatile vs. Non-volatile Memory
 - Input Devices
 - Output Devices
- Binary Numbers
- Software
 - Operating Systems
 - Application Software
 - Syntax Errors vs. Runtime Errors
- Integrated Development Environment (IDE)
 - Visual Studio
 - Code View
 - Form Design Tool
 - Debugging Tool
 - VS Solution
 - VS Project

Visual Basic Concepts

- Data Types
- Literals
- Declaring and using variables
- Variable Scope
- Local Scope vs. Class Scope
- Operators
- Expressions, arithmetic and Boolean expressions
- Operator precedence
- Type Conversion
- Control structures
 - Conditional Statements
 - If...Then
 - If...Then...Else
 - If...Then...Elseif
 - Select...Case
 - Loop Statements
 - Do...While
 - Do...Until
 - For...Next
 - Pretest Loops
 - Posttest Loops
 - Infinite Loops
 - Nested Loops
- TryParse
- With...EndWith
- Exception Handling

GUI Programming

- Forms
- Form Design Tool

Controls

- Button
- CheckBox
- CheckedListBox
- ComboBox
- Label
- ListBox
- RadioButton
- TextBox
- ToolTip
- PictureBox

Containers

- GroupBox
- MessageBoxes
- InputBoxes
- Control Properties
- TabIndex
- Focus
- Keyboard Access Keys

Event Driven Programming

- Events
- Event Handler
- Responding to Events
- Event Procedures

Access Specifiers

- Private
- Public

Methods – Procedures and Functions

- Declaring a procedure
- Declaring a function
- Arguments
- ByVal and ByRef Arguments
- Returning a value
- Local Variables
- Static Local Variables