

PB1060 – Basic PowerBuilder 11 Programming

Course Synopsis	Duration: Five (5) days.		
	Audience: This intensive hands-on course is designed for application programmers responsible for the design and implementation of client/server applications using PowerBuilder 11.		
	Prerequisites: <ul style="list-style-type: none"> • Basic knowledge of the Windows operating system • Introduction to SQL, or equivalent experience • Experience in a programming language, such as COBOL, Visual Basic, C++, or Java 		
	Delivery Method: Instructor led, Hands-on workshops		
Brief Description	This course introduces students to the PowerBuilder 11 development environment. Each component of the PowerBuilder 11 IDE is covered in the context of using PowerBuilder to develop GUI-based client/server business applications. A series of written and lab exercises will be used to reinforce the classroom education.		
Course Objectives What You'll Learn	Upon successful completion of this course, the student will be able to: <ul style="list-style-type: none"> • Use the System Tree to create workspaces and targets • Use the Application Painter to create application objects • Use the Window Painter to create windows • Use the PowerScript language to write scripts to perform required processing • Create user functions and user events • Use the DataWindow Painter to create Data Windows and select appropriate presentation styles and data sources • Use the Query Painter to interactively construct and edit SQL statements • Use the Database Painter to define extended attributes and manage database tables • Use the Menu Painter to create traditional and contemporary menus • Debug PowerBuilder applications • Package a PowerBuilder application for distribution • Discuss the alternative deployment types, including pcode, machine code, and .NET WinForm applications 		
Topics Covered	<table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top; width: 50%;"> I. Introduction to PowerBuilder <ul style="list-style-type: none"> • Role of PowerBuilder in Application Development • PowerBuilder Application Architectures • Platforms and Databases Supported by PowerBuilder • PowerBuilder Concepts and Terminology • Versions of PowerBuilder • PowerBuilder Resource Requirements </td> <td style="vertical-align: top; width: 50%;"> II. The PowerBuilder Environment <ul style="list-style-type: none"> • Painter Structure • Customizing Toolbars • The System Tree • The Clip Window • Managing Painter Views and Panes • Object Browser </td> </tr> </table>	I. Introduction to PowerBuilder <ul style="list-style-type: none"> • Role of PowerBuilder in Application Development • PowerBuilder Application Architectures • Platforms and Databases Supported by PowerBuilder • PowerBuilder Concepts and Terminology • Versions of PowerBuilder • PowerBuilder Resource Requirements 	II. The PowerBuilder Environment <ul style="list-style-type: none"> • Painter Structure • Customizing Toolbars • The System Tree • The Clip Window • Managing Painter Views and Panes • Object Browser
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PB1060 – Basic PowerBuilder 11 Programming**III. Creating an Application**

- Creating Workspaces
- Creating Targets
- Creating Application Objects
- Application Object Properties

IV. Creating Windows

- Types of Windows and Controls
- Building Windows
- Window Inheritance

V. PowerBuilder Scripts

- Language Syntax
- Using the PowerScript Painter
- Control Structures
- PowerScript Functions
- Structures
- Script Inheritance

VI. User Defined Function and Events

- Global Functions versus Object Functions
- Creating User Functions
- Defining User Events
- Invoking User Events

VII. Creating DataWindows

- Presentation Styles
- Data Sources
- DataWindow SQL Options
- Customizing the DataWindow Design

VIII. Managing Database Tables

- Maintaining Database Profiles
- Manipulating Table Data

IX. Implementing DataWindows

- Associating DataWindow Objects with DataWindow Controls
- Transaction Objects
- DataWindow Functions

X. DataWindow Updates

- Controlling Updates
- Data Validation Process
- Transaction Management

XI. Creating Menus

- Menu Styles
 - Traditional
 - Contemporary
- Creating Menu Bars and Toolbars
- Menu Events and Scripts
- Popup Menus
- Menu Inheritance

XII. MDI Applications

- MDI Window Types
- MDI Related PowerScript Functions
- MDI Menus

XIII. Distributing the Application

- Creating an Application Executable
- PowerBuilder Resource Files
- PowerBuilder Dynamic Libraries
- Creating a Machine Code Executable
- Creating a .NET WinForm Application

XIV. Supplemental Topics (as time permits)

- The PowerBuilder Debugger
- Managing Database Tables
 - Creating Extended Attributes
 - Assigning Extended Attributes
 - Creating and Maintaining Table Definitions
- The Library Painter