feesworth
Revit Automation & Customization Training

Chapter 1: Revit API Concepts & Architecture

- Visual studio project creation
- Revit Architecture
- Interact with Revit using C#

Chapter 2: Writing First Code

- Writing first code and Explanation
- Debugging
- Manifest file creation
- Build Events

Chapter 3: Selection

- Element Selection
- Retrieving properties of selected elements
- ISelection Filter (Pre-filtering before selection)
- UnitUltils (Unit conversion)

Chapter 4: Get and Set Element

- Filters Basic
- Get Element using filter
- Set Element using filter

Chapter 5: Filtering

- Quick Filters
- Logical Filters
- Filtering using LINQ
- Retrieve Elements/Ids using Filters

Chapter 6: Transaction

- Single Transaction
- Transaction Groups

feesworth
Revit Automation & Customization Training

Chapter 7: Element Creation(3D/2D)

- Single Wall Creation
- Multiple Wall Creation
- Floor Creation
- Filled Region Creation

Chapter 8: Element Transformation

- Move Element
- Rotate Element
- Mirror Element

Chapter 9: Revit Geometry

- Geometry Element
- Geometry Object
- Geometry Instances
- Retrieve Geometric Properties of an Element

Chapter 10: Project Template Parameters

- Parameter Object Hierarchy
- Retrieve Parameter Value
- Set Parameter Value

Chapter 11: Revit Family (In Project Template)

- Load Family into Project
- IFamilyLoad Options
- Place family into project

Chapter 12: Revit Family (Family Template)

- Create New Family Type & New Parameter
- Set Parameter Value
- Save Family and Load into Project

feesworth
Revit Automation & Customization Training

Chapter 13: External Application

- Tab Creation in Revit UI
- Panel Creation
- Button Creation
- Dropdown Button Creation
- Embed External Command to External Application

Chapter 14: WinForms Application

- Creating WinForms Application
- Modeless WinForms Application
- Access Revit Elements using WinForms

Chapter 15: Revit Events

- Database Events
- User Interface Events

Chapter 16: Revit Failures

- Failure Processing
- IFailurePreProcessor
- IFailureProcessor
- Handling Failures

Chapter 17: Extensible Storage

- Creating E-Storage
- Variable creation and Assign value
- Delete E-Storage
- Retrieve Value from Existing E-Storage

Chapter 18: Revit-Excel

- Access Revit Parameter using Excel
- Append Values from Revit to Excel

Chapter 19: Installer Creation

- Installer Creation (.MSI) for Plugins.

Chapter 20: Project Support

- Project support.

Chapter 21: Career Support

- Resume writing
- Job assistance
- Career guidance