New Horizons® Learning Centres

# 20481 - Essentials of Developing Windows Store Apps Using HTML5 and JavaScript

Duration: **5 days**

## Overview:

In this course students will learn essential programming skills and techniques that are required to develop Windows Store apps. This includes a combination of both design and development skills, as well as ensuring that students are comfortable using and making the most of the Visual Studio and Expression Blend tools.

## Target Audience:

This course is intended for professional developers who have 1 or more years of experience in creating applications.

## Pre-requisites:

Before attending this course, students must have:

- 1 or more years of experience creating applications
- 1 – 3 months experience creating Windows client applications
- 1 – 3 months experience using Visual Studio 2010 or 2012
- Material taught in 20480A: Programming in HTML5 with JavaScript and CSS3, or equivalent

## At Course Completion:

After completing this course, students will be able to:

- Describe review the Windows 8 platform and features, and explore the basics of a Windows app interface
- Create the User Interface layout and structure
- Apply the MVVM pattern to application design
- Implement the AppBar and layout controls
- Use templates to create the UI
- Use data binding to present data in the UI
- Handle files and streams
- Design and implement Process Lifetime Management (PLM)
- Handle navigation scenarios in a Windows Store app
- Implement Semantic Zoom
- Design and implement contracts such as Search, Share and Settings

## Module 1: Overview of the Windows 8 Platform and Windows Store Apps

### Lessons
- Introduction to the Windows 8 Platform
- Windows 8 User Interface Principles
- WinRT and Language Projections

### Lab : Overview of the Windows 8 Platform and Windows Store Apps
- Explore the Windows 8 Platform
- Explore a Windows Store App
- Create an App User Interface Using Visual Studio 2012 and Blend Development Tools

## Module 2: Single-Page Applications and the MVVM Design Pattern

### Lessons
- Single-Page Apps
- The MVVM Design Pattern

## Module 3: Using WinJS

### Lessons
- The WinJS Library
- WinJS APIs

### Lab : Using WinJS
- Define the Data Namespace and Objects
- Use promises to load data asynchronously

## Module 4: Implementing Layout using Windows 8 Built-In Controls

### Lessons
- Windows 8 Layout Controls
- Implementing Templates
- The AppBar Control
- Snap and Scale

### Lab : Implementing Layout using Windows 8 Built-In Controls
- Implement an AppBar Control
- Create Adaptive Views
- Create a Template Control

## Module 5: Presenting Data

### Lessons
- Working with Data Presentation Controls
- The ListView Control

### Lab : Presenting Data
- Create the Data
- Implement the ListView Control

## Module 6: Handling Files in Windows Store Apps

### Lessons
- Handling Files and Streams in Windows Store apps
- Working with File User Interface Components

### Lab : Handling Files in Windows Store Apps
- Read Data from the Notes File
- Write Data to the Notes File

## Module 7: Windows Store App Process Lifetime Management

### Lessons
- Process Lifetime Management
- Launching Windows Store Apps
- Implementing State Management Strategy

### Lab : Windows Store App Process Lifetime Management
- Explore the Different PLM States
- Implement State Management

## Module 8: Designing and Implementing Navigation in a Windows Store App

### Lessons
- Handling Navigation in Windows Store apps
- Semantic Zoom

### Lab : Designing and Implementing Navigation in a Windows Store App
- Add Navigation to the App
- Implement Semantic Zoom

## Module 9: Implementing Windows 8 Contracts

### Lessons
- Designing for Charms and Contracts
- The Search Contract
- The Share Contract
- Managing App Settings and Preferences

### Lab : Implementing Windows 8 Contracts
- Implement the Search Contract
- Implement the Share Contract
- Adding a New Setting to the Settings Pane

- Implement tiles and toast notifications in a Windows Store app
- Respond to mouse, keyboard and touch events, including gestures
- Deploy a Windows Store app to the Windows Store or an enterprise store

## Module 10: Implementing Tiles and User Notifications

### Lessons
- Implementing Tiles, Live Tiles, Secondary Tiles, and Badge Notifications
- Implementing Toast Notifications

### Lab : Implementing Tiles and User Notifications
- Enable Live Tile Functionality on the Main Tile
- Add Secondary Tile Functionality

## Module 11: Designing and Implementing a Data Access Strategy

### Lessons
- Evaluating Data Access Strategies
- Working with Remote Data

## Module 12: Responding to Mouse, Keyboard and Touch

### Lessons
- Working with Mouse Events
- Working with Gesture Events

### Lab : Responding to Mouse, Keyboard and Touch
- Implement Mouse Events
- Implement Gesture Events

## Module 13: Planning for Windows Store App Deployment

### Lessons
- The Windows Store App Manifest
- Windows Store App Certification
- Enterprise App Deployment