20482 - Advanced Windows Store App Development Using HTML5 and JavaScript

Duration: **5 days**

Overview:

In this course the students will learn the more advanced programming skills and techniques that they can use to optimise their Windows Store app and differentiate their app from other apps in the Windows Store. These advanced skills and techniques include a combination of both design and development skills. The students will also learn about supporting the apps that they have published to the Windows Store.

Target Audience:

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

Pre-requisites:

Before attending this course, students must have:

- 6 – 12 months experience programming in HTML5
- 3 – 6 months experience using Visual Studio 2012 (including experience using preview builds)
- 1 month of experience working on Windows 8 apps

At Course Completion:

After completing this course, students will be able to:

- Add animations and transitions in a Windows Store app to improve the user experience
- Localise the Windows Store app UI
- Brand the Windows Store app and improve the loading experience with a splash screen
- Use various storage mechanisms, choose a suitable caching strategy for their Windows Store app, and use advanced file access methods
- Create custom controls, extend templated controls, and create and consume WinMD components
- Implement the Print and Settings contracts and the Play To API
- Work with the Push Notification Service (WNS)
- Capture media with the

Module 1: Windows Store App Essentials

Lessons
- Review of Windows Store App Essentials - Presentation
- Review of Windows Store App Essentials and the Windows 8 Ecosystem

Module 2: Implementing Animations and Transitions

Lessons
- Using Animation
- Working with Transitions and Transformations

Lab : Implementing Animations and Transitions
- Creating Animations in a Windows Store App
- Creating Transitions and Transformations in a Windows Store App

Module 3: Implementing Globalisation and Localisation

Lessons
- Working with Resource Files
- Implementing Culture-Specific Formatting

Lab : Implementing Globalisation and Localisation
- Create and Consume Resource Files
- Apply Culture-Specific Formatting

Module 4: Branding and a Seamless User Interface

Lessons
- Customising the Splash Screen
- Branding the User Interface

Lab : Branding and Seamless User Interface
- Create a Customised Splash Screen
- Branding a Windows Store App

Module 5: Advanced Data Scenarios in a Windows Store App

Lessons
- Windows Store App Storage Options
- Implementing Data Caching
- Advanced File Functionality

Lab : Caching Data
- Cache Data

Module 6: Creating Reusable Controls and Components

Lessons
- Creating Custom Controls
- Extending Existing Controls
- Consuming WinMD Components

Lab : Creating Reusable Controls and Components
- Create and Use a Custom Control
- Consume a WinMD Component

Module 7: Implementing Advanced Contract Scenarios

Lessons
- The Print Contract
- The Play To Contract

Lab : Printing
- Print a single page
- Print multiple pages

Module 8: The Windows Push Notification Service (WNS)

Lessons
- The Push Notification Service (WNS)
- Communicating with the Push Notification Service (WNS)

Lab : The Windows Push Notification Service (WNS)
- Manage a Windows Notification Service (WNS) Channel

Module 9: Capturing Media

Lessons
- Using CameraCaptureUI to Capture Pictures, Videos or Audio
- Using MediaCapture to Capture Pictures, Video, or Audio

Lab : Capturing Media
- Capture video using the CameraCaptureUI API
- Capture image using the MediaCapture API

Module 10: Background Tasks

Lessons
- Creating Background Tasks
- Consuming Background Tasks in a Windows Store App

Lab : Background Tasks
- Create and Consume a Background Task
- Consume a Background Task

camera and microphone
- Create and consume background tasks
- Discover device capabilities, interact with devices, and act upon sensor data
- Implement Windows Store trial licensing and in-app purchasing and advertising
- Understand how to manage Windows authentication and web authentication in Windows Store apps
- Diagnose problems and monitor application behaviour using tracing and profiling tools and APIs

Module 11: Working with Sensors and Devices

Lessons
- Working with Sensors
- Working with Devices

Lab : Working with Sensors and Devices
- Use the orientation sensor
- Use location services

Module 12: Generating Revenue with your App

Lessons
- Implementing Trial Functionality in a Windows Store App
- Implement In-App Purchases
- Advertising in a Windows Store App

Lab : Generating Revenue with your App
- Use Windows.Store Classes to Support Trial App Conversion
- Implement In-App Purchasing in an App

Module 13: Securing Windows Store App Data

Lessons
- Managing Windows Authentication
- Managing Web Authentication
- Encryption in Windows Store Apps

Lab : Securing Windows Store App Data
- Encrypt User Information
- Use ACS Authentication

Module 14: Tracing and Profiling Windows Store Apps

Lessons
- Tracing a Windows Store App
- Profiling a Windows Store App