Windows 8 development was a successful transition from the previous versions of Windows. It began the transition into a multi-device Windows Operating System. The fact that it incorporated touch controls really set it apart from its predecessors. As technology continues to move forward, it is no doubt that developers will need to stay up to date with the current technologies being used. The fact that Windows 10 is now the flagship operating system for Microsoft, it is confusing why they are still teaching the Windows 8 store app development course in the Microsoft Software and Systems Academy (MSSA). With the Universal Windows Platform available, it is in the best interests of the program to teach this framework.

The proposed exam for this path is Exam 70-354 Universal Windows Platform App Architecture and UX/UI. Many skills are required for this certification and they are basically the same skills required in the Windows 8 version of the course. The five major skills that are needed to pass the exam include the ability to design specifications for a mobile line of business app (LOB), implement the application lifecycle management process, the ability to develop a LOB app that supports windowing, adaptive layout, and in-app navigation, the ability to develop a LOB app that supports user input and user interactions, and the ability to test and deploy a LOB app. These five main skills can be broken down into subskills as well. A list will be provided on the last page of this document.

Microsoft certifications can really benefit people seeking to get into the IT industry. With the Cloud Application Development path of the MSSA program, it is assumed that a majority of the participants will be wanting to follow the Microsoft Certified Solutions Developer certification path. Exam 70-354 is an exam that can lead participants down this path. After obtaining the required skills which include C# and UWP development, the participants will be well prepared to attempt the App Builder Path for certification. This would give an advantage to MSSA participants who are looking to get into application development.

To prepare for such a certification, the participants must utilize classroom time as well as time outside of the classroom to fully understand the materials. There are many different resources that focus on the development of UWP apps, but the Microsoft Developers Network (MSDN) will provide the most updated documentation. The documentation is very well written and the participants should be familiar with its layout after utilizing MSDN during the C# portion of the training. (Intro to Universal Windows Platform, n.d.) Another great resource is a series of videos recorded by Bob Tabor. The series is called Windows 10 Development for Absolute Beginners. It can be found in many locations on the internet, but Youtube is the easiest method to view the series. (Windows 10 Development for Absolute Beginners Series, n.d.)

With Windows 10 being integrated in most computers, understanding UWP development will allow students to be prepared for the future. The fact that UWP allows for developers to create applications for multiple devices, allows them to be proficient in a multitude of technologies including mobile. This will give them a huge advantage when beginning the job search. The breadth of knowledge learned in this course, will give users more to talk about during technical interviews. Understanding a multitude of frameworks is vital for the IT industry and UWP would be a great addition to the participants resume.

**Exam Skills Covered**

* Create the design specification for a mobile line of business app
  + Specify the app development and business requirements
  + Specify the architecture of the app
  + Design the app in association with the user-experience(UX) criteria
* Implement application lifecycle management process
  + Implement version control using TFVC and GIT
  + Implement team Collaboration
  + Implement automated testing
* Develop an LOB app that supports windowing, adaptive layout, and in-app navigation
  + Use appropriate XAML controls on the UI requirements
  + Implement data binding; implement data templates
  + Develop code to support scaling and windowing
  + Implement styles and themes
  + Implement UI animations, transitions, and transformations
  + Create reusable controls and components
  + Implement app navigation patterns
  + Implement globalization and localization of presented UI content
* Develop an LOB app that supports user input and user interactions
  + Develop code to implement tradition input devices
  + Develop code to implement speech and voice commands
  + Implement natural user interface input
  + Develop code to implement command bars, flyouts, dialogs
* Test and Deploy an LOB App
  + Implement general diagnostics and testing code
  + Implement profiling
  + Integrate monetization techniques
  + Prepare package for publication

# Learning References

*Intro to Universal Windows Platform*. (n.d.). Retrieved from Microsoft Developers Netowrk: https://docs.microsoft.com/en-us/windows/uwp/get-started/universal-application-platform-guide

*Windows 10 Development for Absolute Beginners Series*. (n.d.). Retrieved from Youtube.com: https://www.youtube.com/watch?v=SiaUzO72tqE&list=PLi2hbezQRVS0cPMeW3uDlUHnO\_rPvJCV9