Voice Recognition Project – 25%
Due Date: March 24th, 2021

Outline:

Create and implement the framework for a voice controlled application or game of your choosing. You will need to create an XML based grammar to be incorporated into the application/game.

You can develop using either Unity or Visual Studio (UWP) to run on either the Windows or a mobile platform. The software should be fully functional, not just a set of text boxes on the screen. For example, if you create a grammar for a card game, then you need to create the game itself to play using voice. The voice control does not have to completely replace the mouse and keyboard in this assignment, but it must complement it.

The grammar must have at least 6 main rules included in the scenario/application/game. They must demonstrate the concepts of alternatives and expansions. Rules can be used for navigation, settings, commands and data entry, but the uses must be clearly identified and explained in the submission document.

The UX should be smooth, clear and feedback should be given to the user when appropriate to do so. The use of the voice commands should feel natural within the context of the application and need very little explanation to the user beyond a simple example of what needs to be said in that scenario.

Write a submission document describing the application you have created. The grammar must be provided in detail with the commands incorporated and the rules that were programmed into the XML grammar.

Create a short video demonstrating your application and explaining your code structure.

Submission

Regardless of which development environment you use, all generated/temporary files are to be deleted before submission.

Create **one ZIP file** with the submission document and your code in it. This is to be uploaded to Learn Online in the space provided. There is a maximum file size of 2Gb allowed.

Submissions not in line with the above will be penalised.

Submission is to be made on or before March 24th at 4pm.

Marking Rubric

0 - 35%	35 − 75%	75 − 100%
Less than 6 rules identified and created for the application.

Implementation has achieved minimum functionality.

Implementation may contain some syntax and/or run-time errors.

Implementation code is poorly documented and/or formatted.

Obvious that application is not properly tested.

Implementation code will not follow applicable coding conventions. | 6 or more rules identified and created for the application.

Implementation has expected functionality for the context developed to a basic level.

Implementation free from syntax and/or run-time errors.

Implementation code will be reasonably commented and/or formatted.

Implementation will be tested to a reasonable degree.

Implementation code follows appropriate coding conventions. | 6 or more rules identified and created for the application.

Implementation has better than expected functionality for the context developed.

Implementation free from syntax and/or run-time errors.

Implementation code will be well commented and/or formatted.

Implementation of code will follow coding conventions demonstrating use of appropriate patterns

Game implementation adds significantly in a positive way to the design submitted |