## CSE 20212-01 Final Project Update 1

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In the last few weeks, we have worked on expanding our game engine design and have begun working on SDL tutorials and researching development tools for Windows Apps.

As far as Windows Development environments go, we have pretty much settled on Microsoft Visual C++ as a development environment for our project. Visual Studio has a number of useful development tools such as local version control and integrated compilers that simplify many of the more complex aspects of development and make integration of additional packages like SDL 2 much easier.

Our game is very art-dependent, so we have been focusing on SDL tutorials that will allow us to deploy complex bitmap graphics to the screen, like character sprites and background areas. This is an ongoing process, but once we are able to move loaded sprites around the screen, most of the remaining work on the project will be focused on gameplay mechanics.

Our current idea for the game engine is to have a driver class to run the game with the main instance of the game, being moving the player's character sprite around the background map(s). If/when a battle is initiated, a different engine class will handle the battle display and sprites as well as all the functions relevant to the battling mechanic. In the overworld map, there will also be a collision detection system to keep the player from walking out of bounds and to recognize when a trainer battle should be initialized. The idea for some of the class structure is to have a trainer class for the player character and any opponents or friends that the player interacts with in the game, each composed of a vector of up to six instances of a Pokemon class to represent the user's party, as well as variables for the basic attributes of the character (name, money, badges, etc).