The design our team chose for the prototype was Object-oriented. This design type utilizes a process of multiple classes that interact with each other to run a piece of software.

Our thinking about our choice for designs was the method in which we design our programs usually is through the creation of classes and the functions within them. Our chosen language for the project is Python, which is an object-oriented language that makes it especially easy to create and use classes and objects. Furthermore, our Project 3 is creating an arcade-like website that holds multiple games. The main reason why we chose this is because the games we are making are designed to mainly run off objects and classes that interact off each other to run the game.

For example, our Tetris game uses multiple classes like the Blocks and Game class to create a functioning Tetris game. Inside the Game class it defines how the blocks/shapes falling down the screen can be manipulated. It utilizes helper functions to prevent invalid placement of the shapes. The second class, Figure, is used to randomize the shape that falls down the screen. Creating these classes assists us in organizing and encapsulating portions of the code so that it doesn’t become a jumbled mess.

Our other game, Pong, uses multiple classes too. Like Tetris it uses two classes named Ball and Paddle. The first class, Ball, is for the purpose of managing the design and manipulation of the ball. Paddle is used to define the thick line of each side the screen that reflects the ball in the other direction. The functions within Paddle design and manipulate the bar. Like the classes in Tetris these objects help separate the code and prevent it from confusing the reader, allowing the code to be easy to read whilst still being efficient.