2.
   a. A particle system is the simulation of real life effects such as fire, explosions, rain, etc. with particles in Unity. In our Zombie Runner game, an example of particles is a smoke/explosion effect from the Carbine when it is shot. Other examples could be blood effects in shooter games to indicate a target has been hit or weather effects in a survival game such as rain or snow.

4.
   a.

      i. Animation Controller → A state machine that manages the arrangement of various animations, how and when these animations play, as well as transitions between various animations.

      ii. Animation → A record sequence of changes or motions that a GameObject experiences while in a specific animation state (e.g. running, attacking).

      iii. Transition → The change from one animation state to another. One way to define a transition is Exit Time, which is a set time that a GameObject will spend in a given animation state before switching to another regardless of what else is happening in the game. Another way to define transitions is by conditions, which only cause animation states to change if certain parameters are met, determined by what is happening in the game. For example, in the Zombie Runner game, the parameter that determines whether the Attack animation is played is a boolean variable that is True if the Zombie is close to the player and False if it isn't.