Sequence UML

The UML sequence diagram can be used for behavioral modeling. Sequence diagrams can also be used to show how events cause transitions from object to object. Once events have been identified by examining a use case, the modeler creates a sequence diagram—a representation of how events flow from one object to another as a function of time. The sequence diagram is a shorthand version of the use case. It represents key classes and the events that cause behavior to flow from class to class. The below figure illustrates the sequence diagram for Kid's Math Game. Each of the arrows represents an event (derived from a use case) and indicates how the event channels behavior between Kid's Math Game. Time is measured vertically (downward), and the narrow vertical rectangles represent time spent in processing an activity. States may be shown along a vertical timeline.

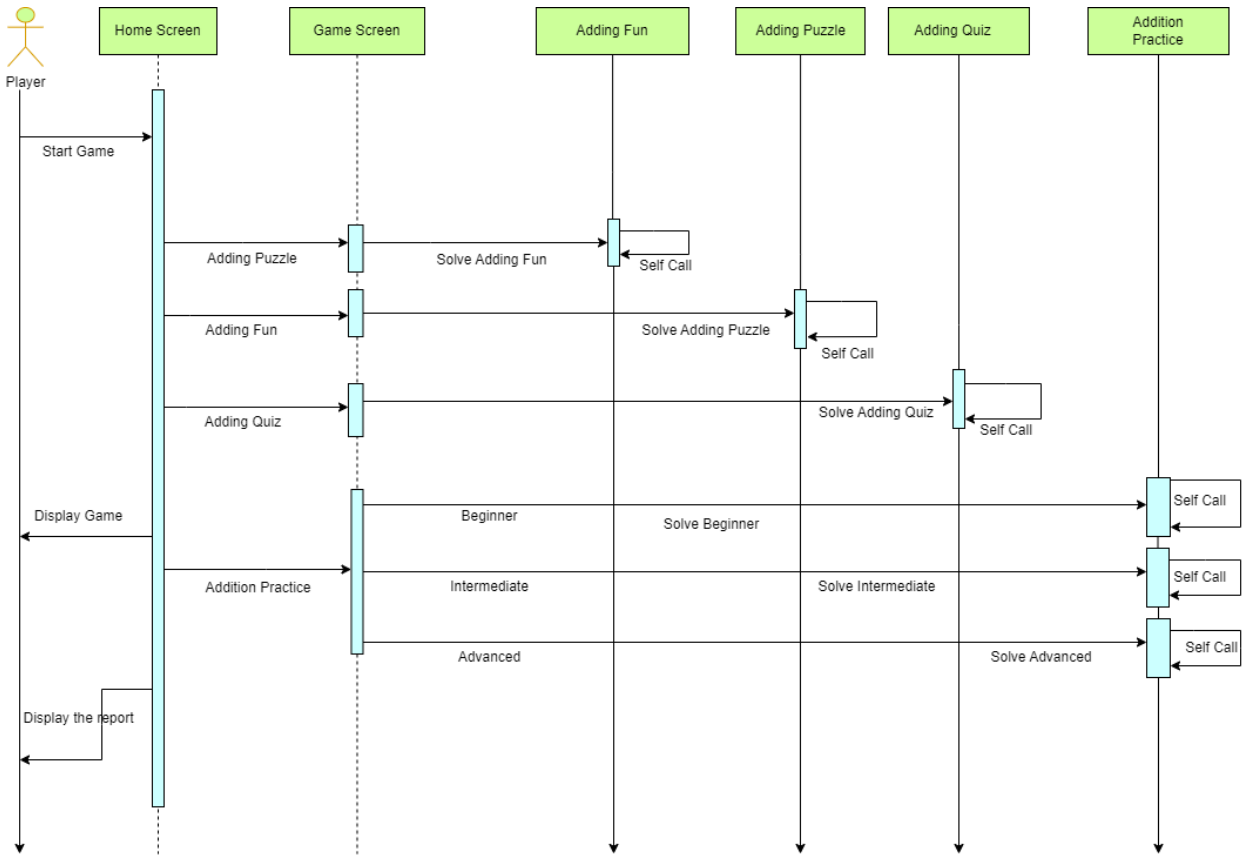

Figure 1 Sequence UML for Kid's Math Game

The first event, “Start Game” is derived from the external environment and channels behavior to the Home Screen object. The player can see different objects on the Home Screen such as, “Adding Fun, Adding Puzzle, Adding Quiz, and Addition Practice”. The player can solve Addition Practice with three levels “Beginner, Intermediate and Advanced”. Once he enters any of the objects, he will have options to solve the game or to quit the game. He can play all the games according to the object he enters.