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**Object-Oriented Development**

**Section:** W01

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**Iteration 1**

**Use Case Diagram:** This diagram represents the agent’s lists, and multiple options for different trips that the clients can choose from. Use case diagram helps to understand the application and different roles that are attached to the application. It is also a tool that shows how each role can affect the application. It captures the requirements of booking a new trip. The travel agent has more tasks to do through the application than any other role, since they are going to assign the trips and the travelers and the count of how many travelers are going to be on any trip. They are also responsible for how the trip is going to be made and what type of transportation will be used as well.

**Class Diagram:** It helps to show the static structure of classifiers in the application. This diagram provides a basic notation for other structure diagrams prescribed by the application. This tool helps the developers to understand the instructions and the roles of each representative through the application. It also has a class for the trip details that include reservations and transportation. That makes it easier for the clients to understand and have all the needed information for the trip.

**State Machine Diagram:** It is a condition or a situation during the life of an object during which it satisfies some condition. It performs some activity or waits for some event. The state diagram of the travel application is evaluated after the booking event for the trip. The system will wait for the client information and clients’ payment. According to the choices that the travel agents made about the trip. The choices of transportation and the locations of the trip will make the differences of the state machine. Each diagram shows the loads of different states. The state machine helps to save and load the different choices that allow the clients to be able to go back to the system and make any adjustments.