# Class diagram:

The class diagram breaks the components into 4 overall packages based on functionality and category: trip planning, billing, serialization, and people. The classes themselves follow a convention: all attributes are either private or read-only, methods (including constructors) are limited to the minimum required accessibility.   
 There were several design choices that were driven by the UI, such as the PaymentType and PersonType enums. These are perhaps unnecessary when the objects they refer to are solely utilized internally, but they present a great method of collecting the different types into a usable structure, for say a printed list of options in a CLI or a drop-down in a GUI. Though this UML modelling tool restricts the possibility, the enums will most likely carry a reference to the class it is associated with so they can be instantiated using the enums. For example, PersonType.Traveller.getNewInstance() might be used instead of a strict factory. There are also some enums that could be used even more like ordinary classes, such as the TransportType enum. This could be used to store the different values associated with each transport type, e.g. speed, for easy access throughout the program.

# Use case diagram:

The use case diagram shows the important characters, in our case it’s the our extremely rich customers, our travel agent, and the money guy for our extremely rich customers. The main use case is making the reservation which has the extended relationship from the point that our customers contact the travel agent, it also has the include relationships to the steps that are needed to complete the transaction.

# State Diagram:

The state diagram describes the complete behavior of the premium travel agency. Almost every part of the program can be paused and resumed at a later time, for example, if the payment is not complete then the travel agent may put the itinerary plan on hold and continue later. Another key point for the state diagram is that if the trip is already created, then the program would just show the itinerary.