A screenshot of a computer screen

Description automatically generated

List of system operations:

* initializeBooking()
* searchAvailability(date, time, location, mode)
* selectOffering()
* enterCustomerDetails(customer\_details)
* addGuardian(guardian\_details)
* viewBookingDetails(booking\_id)
* cancelBooking(booking\_id)

Contract CO1: initializeBooking

Operation: initializeBooking()

Cross References: Use Case: ProcessBookings

Preconditions:

* Customer is registered and wants to make a booking.

Postconditions:

* Customer associated with Terminal. (association formed)

Contract CO2: searchAvailability

Operation: searchAvailability(date, time, location, mode)

Cross References: Use Case: ProcessBookings

Preconditions:

* Customer provides required information for search.

Postconditions:

* Terminal associated with LessonOfferingCatalog. (association formed)

Contract CO3: selectOffering

Operation: selectOffering()

Cross References: Use Case: ProcessBookings

Preconditions: None

Postconditions:

* Terminal associated with a LessonOffering object. (association formed)

Contract CO4: enterCustomerDetails

Operation: enterCustomerDetails(customer\_details)

Cross References: Use Case: ProcessBookings

Preconditions:

* Customer needs to provide his customer details.

Postconditions:

* A Booking instance is created. (instance creation)
* Booking instance associated with LessonOffering. (association formed)
* Booking instance associated with Customer. (association formed)
* Attribute booking\_id of Booking instance modified. (attribute modification)
* Attribute booking\_date of Booking instance modified. (attribute modification)
* Booking instance associated with BookingDB. (association formed)

Contract CO5: addGuardian

Operation: addGuardian(guardian\_details)

Cross References: Use Case: ProcessBookings

Preconditions:

* Customer’s age < 18.
* Guardian instance exists and associated to Customer.

Postconditions:

* A Booking instance is created. (instance creation)
* Booking instance associated with LessonOffering. (association formed)
* Booking instance associated with Customer. (association formed)
* Booking instance associated with Guardian. (association formed)
* Attribute booking\_id of Booking instance modified. (attribute modification)
* Attribute booking\_date of Booking instance modified. (attribute modification)
* Booking instance associated with BookingDB. (association formed)

Contract CO6: viewBookingDetails

Operation: viewBookingDetails(booking\_id)

Cross References: Use Case: ProcessBookings

Preconditions:

* Customer instance is associated with Booking instance.

Postconditions: None

Contract CO7: cancelBooking

Operation: cancelBooking(booking\_id)

Cross References: Use Case: ProcessBookings

Preconditions:

* Customer instance is associated with Booking instance.

Postconditions:

* Association destroyed between Booking instance and Customer instance.