Operation Contracts for Bookings

System Operations: bookOffering(adult), bookOffering(minor), cancelBooking

Contract 1: bookOffering

**Operation:** bookOffering(offeringID: Integer)

**Cross Reference:** Use Case: Process Bookings

**Preconditions:**

* A valid offeringId exists
* The client is not a minor

**Postconditions:**

* Success Scenario:
  + A booking instance was created and added to the BookingCatalogue.
* Failure Scenarios:

1. The given offeringId does not exist in the system.
2. A minor client tried to book.
3. Booking is full.

Contract 2: bookOffering

**Operation:** bookOffering(offeringID: integer, minor: Client)

**Cross Reference:** Use Case: Process Bookings

**Preconditions:**

* OfferingID is a valid id
* The client (a legal guardian) is booking on behalf of a minor.

**Postconditions:**

* Success Scenario:
  + A booking instance was created and added to the BookingCatalogue.
  + The client who booked is added as the legal guardian of the minor.
* Failure Scenarios:

1. No offerings were found with the given offeringID.
2. Booking is full.

Contract 3: cancelBooking

**Operation:** cancelBooking(bookingID: Integer)

**Cross Reference:** Use Case: cancel booking

**Preconditions:**

* bookingID is a valid id.

**Postconditions:**

* Success Scenario:
  + instance booking (instance with the given bookingID) was found, deleted and removed from the bookingCatalogue.
* Failure Scenarios:

1. No offerings were found with the given bookingID.