|  |  |  |  |
| --- | --- | --- | --- |
| HolidayBookingApplication | Booking | Hotel | Cottage |
|  | #Name – String  #BookingReference – String  #StartDate – String  #duration - int | -roomNumber – int  -breakfast - boolean | -address – string  -keyCollection - char |
| main() | +Booking()  +setName(name:String)  +getName():String  +setBookingReference(bookingReference:String)  +getBookingReference():String  + setDuration(duration:int) | +Hotel()  +setRoomNumber(roomNumber:int)  +getRoomNumber():int  +setBreakfast(breakfast:boolean)  +getBreakfast():boolean | +Cottage()  +setAddress(address:String)  +getAddress():String  +setKeyCollection(keyCollection:char)  +getKeyCollection():char |

Now add in the following:

The application should enable you to create bookings of type Hotel or Cottage with all the necessary info and then calculate the total cost of the booking based on the following:

Hotel rooms cost 130 euro per night and charge €10 extra per night for breakfast.

Cottages cost sixty euro per night with an additional once of charge of fifty euro for electricity.

Example of polymorphism

Example of an abstract class