Hotel **Hotel Reservation System - Class Diagram** -name: String Numan Mir -id: int Notes -rooms: ArrayList<Room> · Italicized class name +getRooms(): ArrayList<Room> represents an abstract class · Black diamond represents composition relationship 1..* (dependency) • "-" precedes a private User Room field/method -username: String -roomId: int • "+" precedes a public -name: String -roomType: String field/method -availability: HashMap<LocalDate, -userId: int boolean> +checkRoomAvailability(roomType, -dailyRate: float startDate, numDaysToStay): + isAvailable(startDate, Room +cancelReservation(reservationId): numDaysToStay): Boolean + getId(): int Boolean + getType(): String + getDailyRate(): double + getAvailability(): HashMap<LocalDate, Boolean> HotelAdmin Customer -reservations: -customersBooked: List<Reservation> ArrayList<Customer> -balanceToPay: double 0..* 0..* +makeReservation(room, +requestPayment(customer id, Reservation startDate, numDaysToStay): reservationId): Boolean Reservation -id: int +updateRoomAvailability(reservation) +makePayment(reservationId): -customerName: String Boolean -room: Room -startDate: localDate -numDaysToStay: int -totalCost: double +getStartDate(): LocalDate +getNumDaysToStay(): int +getRoom(): Room +getTotalCost(): int