

```
package model;

import data.Database;

import java.util.List;

/**
 * This class is the parent class for the three payment methods, namely
 * CreditCard,
 * Cash and MobilePay.
 *
 */
public class Payment {
    private String bookingRef, method;
    private int amount, id;
    private static int counter;

    /**
     * Database Constructor
     *
     * @param newId ID of the payment
     * @param newBookingRef Reference to a (unique) Booking
     * @param newAmount Amount of the payment
     * @param newMethod Method of the payment
     */
    public Payment(int newId, String newBookingRef, int newAmount, String
        newMethod) {
        id = newId;
        bookingRef = newBookingRef;
        amount = newAmount;
        method = newMethod;
        counter++;
    }

    /**
     * In-App Constructor
     *
     * @param newBookingRef Reference to a (unique) Booking
     * @param newAmount Amount of the payment
     */
    public Payment(String newBookingRef, int newAmount) {
        id = ++counter;
        bookingRef = newBookingRef;
        amount = newAmount;
        method = null;
    }

    /**
     * Write a line to the database
     */
    public void toDB() {
        Database.write("payments", this.id+";"+this.bookingRef+";"+this.
            amount+";"+this.method+";;; ");
    }

    // Start getter
    public int getId() {
        return this.id;
    }
}
```

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public String getBookingRef() {
    return this.bookingRef;
}

public int getAmount() {
    return this.amount;
}

public String getMethod() {
    return this.method;
}
// End getter

/**
 * Set payment method method
 * @param paymentMethod Payment Method as String (credit card, cash, or
 *     mobile pay)
 */
public void setMethod(String paymentMethod) {
    this.method = paymentMethod;
}

// Start print methods
public static String printTableHeader() {
    return String.format("\t | %-18s | %-8s | %-15s | %-9s | %-10s |\n"
        ,
        "Booking Reference", "Amount", "Payment Method", "Last Four"
        , "Mobile Phone");
}

public static String printLine(Payment payment) {
    return String.format("\t | %-18s | %-8s |\n",
        payment.getBookingRef(), payment.getAmount()/100.0);
}

public String printLine() {
    return String.format("\t | %-18s | %-8s |\n",
        this.getBookingRef(), this.getAmount()/100.0);
}

public static String toString(List<Payment> payments) {
    String out = String.format("\n\n\tPAYMENTS:\n");
    out += printTableHeader();
    for ( Payment payment : payments ) {
        out += printLine(payment);
    }
    return out;
}

public String toString() {
    String out = String.format("\n\n\tPAYMENT:\n");
    out += printTableHeader();
    out += printLine(this);
    return out;
}
// End print methods

/**
 * Report methods printing all payments in the database.
 */

```

```
public static String report() {
    String out = String.format("\n\n\tPAYMENTS:\n");
    out += printTableHeader();
    for ( Payment payment : Database.getPayments() ) {
        out += payment.printLine();
    }
    return out;
}
}
```