Methods:

- Payment(cust:Customer) is a *constructor.*[3] When invoked, it creates a new Payment object and links it to the :Customer reference which is passed in as a parameter.
- calculateTotalPayment(hire:Hire) is designed to work out the total payments for a customer who has hired several bikes. As, in this implementation, there is only one customer hiring one bike, this method is only partially implemented. calculateTotalPayment() calls the private method issueReceipt().
- issueReceipt(hire:Hire) prints a receipt. Notice that on the diagram this method has a minus sign in front of it, indicating that it is a private method. This means that it can only be used by instances of the Payment class.

Bike class The Bike class combines the functions of the entity class, Bike, and a collection class that has a list of all the :Bike identifiers. For simplicity we have limited the Bike attributes to deposit, rate and bikeNumber.

Methods:

- Bike(dep:int, rat:int, num:int) is a constructor. When invoked, it creates a new Bike object and sets its attributes to the values passed in as parameters.
- findBikeByNumber(bikeNum:int) is part of the collection class functionality; it iterates through a list of :Bikes until it finds one with a matching bike number.
- showDetail() is used to display the bike details that have been found by findBikeByNumber().
- calculateCost(numberOfDays:int) works out the cost of hiring the bike for the specified period.[4]

Customer class. The Customer class is the same entity class that featured in the analysis model. As with the Payment objects, each :Customer has a unique customerId which is generated by the class variable customerCount. For simplicity, we use a postcode attribute instead of a full address. Although, in the code, it has three get methods, the only method shown on the model is a constructor.

3. *A constructor is readily identifiable as its name is always the same as the class name.*
4. *This method replaces the getCharges(no.Days) method shown on the analysis class diagram.*