

Table 11.1: Table showing mapping of sequence diagram messages to lines of code

Sequence diagram message	Code line	Sending object/ class	Receiving object/class
1 constructor()	13	StartUp	IssueBikeUI
2 showBikeDetails(bikeNum)	16	StartUp	IssueBikeUI
2.1 findBikeByNumber(bikeNum)	44	IssueBikeUI	Bike
2.1.1 getBikeNumber()	116	Bike	Bike
2.2 showDetails()	47	IssueBikeUI	Bike
3 calculateCost(numDays)	19	StartUp	IssueBikeUI
3.1 calculateCost(numDays)	54	IssueBikeUI	Bike
4 createCustomer(name,postcode,tel)	22	StartUp	IssueBikeUI
4.1 constructor(String,String,int)	59	IssueBikeUI	Customer
4.2 constructor(Customer)	60	IssueBikeUI	Payment
5 constructor(Date,int,Bike,Customer)	61	IssueBikeUI	Hire
6 calculateTotalPayment()	25	StartUp	IssueBikeUI
6.1 calculateTotalPayment(Hire)	66	IssueBikeUI	Payment
6.1.1. issueReceipt(Hire)	237	Payment	Payment
6.1.1.1 getName()	242	Payment	Customer
6.1.1.2 getPostcode()	243	Payment	Customer
6.1.1.3 getBikeNumber()	247	Payment	Bike
6.1.1.4 getNumberOfDays()	248	Payment	Hire
6.1.1.5 calculateCost(int)	250	Payment	Bike

### StartUp class

```

1 package bikeshop;
2
3 /* Generated by Together */
4
5 public class StartUp {
6
7     public static void main(String[] args){
8

```

Figure 11.10 The code listing for the Wheels system