

```
1  import java.io.Serializable;
2  import java.time.*;
3  import java.time.format.*;
4  import java.util.Locale;
5
6  public abstract class Lesson implements Serializable
7  {
8      private DayOfWeek day;
9      private LocalTime startTime;
10     private LocalTime endTime;
11     private Staff staff;
12     private Venue venue;
13     private CourseOffering offering;
14     private int numberEnrolled;
15     static DateTimeFormatter timeFormat = DateTimeFormatter.ofPattern("h:mm a");
16
17     public Lesson(DayOfWeek day, LocalTime startTime, int dur, Venue venue,
18                 CourseOffering offering) throws ClashException,
19                 LessonTimeOutOfBoundsException
20     {
21         this.day = day;
22         venue.checkLessonBounds(day, startTime, startTime.plusMinutes(dur));
23         this.startTime = startTime;
24         this.endTime = startTime.plusMinutes(dur);
25         staff = null;
26         venue.checkClash(day, startTime, endTime);
27         this.venue = venue;
28         venue.addLesson(this);
29         this.offering = offering;
30         this.numberEnrolled = 0;
31     }
32
33     public LocalTime getStart()
34     {
35         return startTime;
36     }
37
38     public LocalTime getEnd()
39     {
40         return endTime;
41     }
42
43     public DayOfWeek getDay()
44     {
45         return day;
46     }
47
48     public Staff getStaff()
49     {
50         return staff;
51     }
52
53     public void setStaff(Staff staff)
54     {
55         this.staff = staff;
56     }
57
```

```
58     public Venue getVenue()  
59     {  
60         return venue;  
61     }  
62  
63     public CourseOffering getCourseOffering()  
64     {  
65         return offering;  
66     }  
67  
68     public int getNumberEnrolled()  
69     {  
70         return numberEnrolled;  
71     }  
72  
73     public void setNumberEnrolled(int numberEnrolled)  
74     {  
75         this.numberEnrolled = numberEnrolled;  
76     }  
77  
78     public String toString()  
79     {  
80         String s = "Venue: " + venue.getLocation();  
81         s += "\nDay: " + day.getDisplayName(TextStyle.FULL,  
82             Locale.getDefault());  
83         s += "\nStart time: " + timeFormat.format(startTime);  
84         s += "\nEnd time: " + timeFormat.format(endTime);  
85         if(staff != null)  
86         {  
87             s += "\nStaff: " + staff.getName();  
88         }  
89         return s;  
90     }  
91 }  
92
```