

02161 Software Engineering 1 Exercise in Testing

Please read the whole text before you do this exercise.

This problem concerns the development and test of a class `TimeC` that should be used to represent points of time. The class should provide:

- a constructor that takes hours and minutes (over hours) since midnight as argument:

```
public TimeC(int hours, int min)
```

- methods that return hours and minutes (over hours) since midnight:

```
public int getHour()  
public int getMin()
```

- a method that resets the time to midnight:

```
public void reset()
```

- a method

```
public int compareTo(TimeC t)
```

`s.compareTo(t)` should return `-1` if `s` is earlier in the day than `t`, `0`, if they are equal, and `1`, if `s` is later in the day than `t`

Questions to be made by two persons X and Y:

1. Design a functional test for the class and implement it in a test class.
2. Complete the `TimeC` class.
3. Design a structural test for the `TimeC` class and implement it in a test class.
4. Run both tests.
5. Make conclusions.

I suggest that the questions are solved by two persons: First X solves question 1 while Y solves questions 2-3. (If X is finished before Y, X can also answer question 2.) Then X and Y collaborates about questions 4 – 5.