

# Year 2 Computing – Semester 3

## COMP H2031: OOAD

### Object Oriented Analysis & Design

Academic term	2021/22
Year of study	Year 2
Semester	SEMESTER ONE – AUTUMN paper
Date of examination	Week 7 lab: <b>Group 6 – Monday 8th November 2021</b>
Time of examination	35minutes test + 5 minutes ZIP and upload

COMP H2031: Object Oriented Analysis & Design

PHP & Java Coding Test – **[[ part 2 Java – question 3]]**

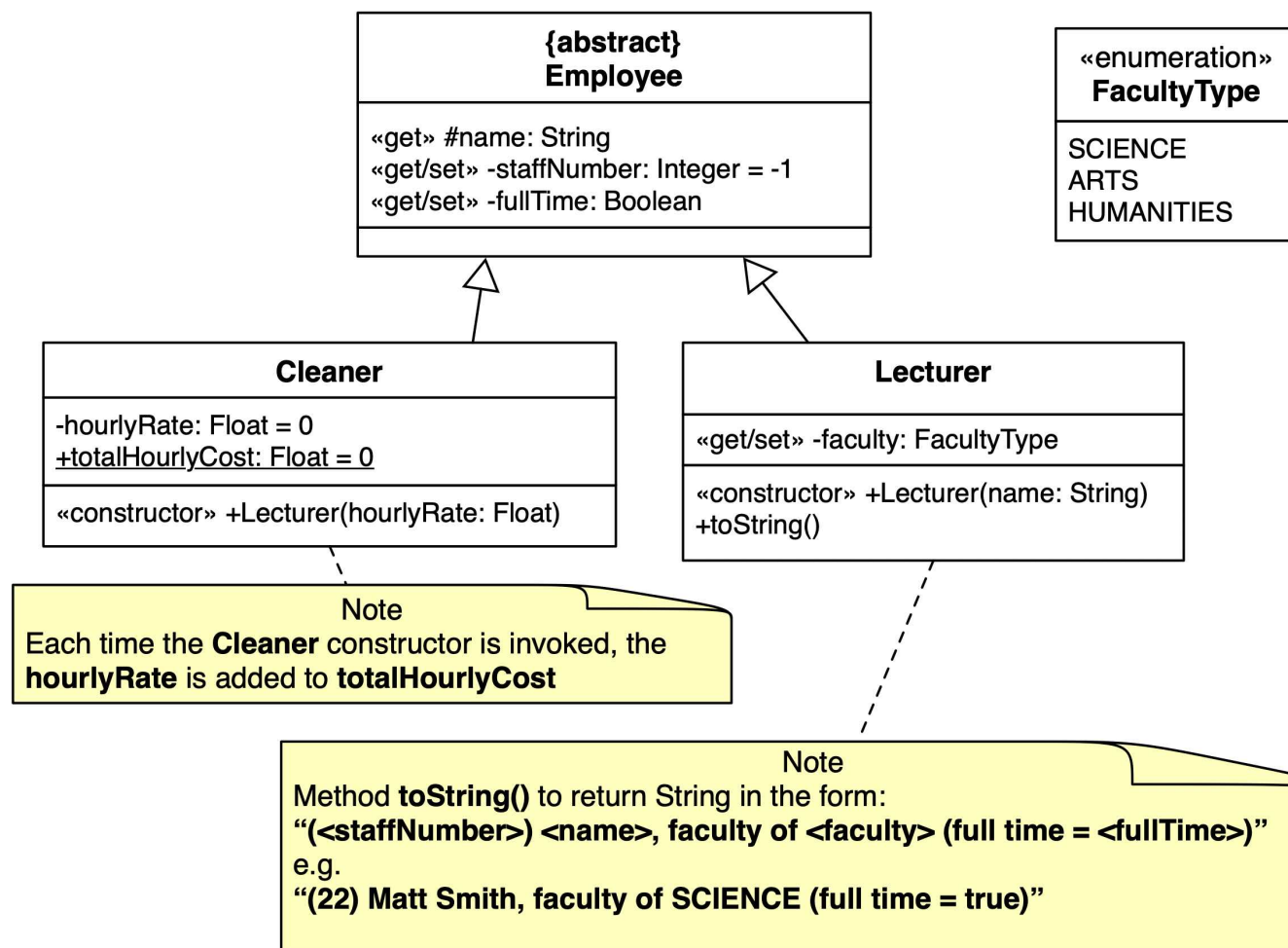
Internal Examiner(s)	Dr. Matt Smith
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#### Instructions to candidates:

1.	To ensure that you take the correct examination, please check that the module and programme which you are following is listed in the table above.
2.	This part of the test is worth 50 marks
3.	<b>Submit one ZIP file:</b> <ul style="list-style-type: none"> <li><b>question3.zip</b></li> </ul>

**DO NOT TURN OVER THIS PAGE UNTIL YOU ARE TOLD TO DO**

Submit your answers to this question in folder: **question3/**



**Qu. (3a)** Write Java files to implement the classes in the diagram above

**Qu. (3b)** Write a **main(...)** method in class **Main** to:

- Create a **Lecturer** object with hourly rate of 12.99
  - name = Sean Murphy / staffNumber = 88 / fullTime = false / faculty = ARTS
- Print out the details of the **Lecturer** object – the output should be:
- Print out the value of **totalHourlyCost** from class **Cleaner** (should be zero)
- Create 2 **Cleaner** objects (**c1** and **c2**), each with an hourly rate of 12.99
- Print out the value of **totalHourlyCost** from class **Cleaner** (should be 25.98)

Your program output should look as follows

```
$ java Main
```

```
(88) Sean Murphy, faculty of ARTS (full time = false)
```

```
0.0
```

```
25.98
```