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: Group 6 – Monday 8th November 2021**
Time of examination	**35minutes test + 5 minutes ZIP and upload**

COMP H2031: Object Oriented Analysis & Design

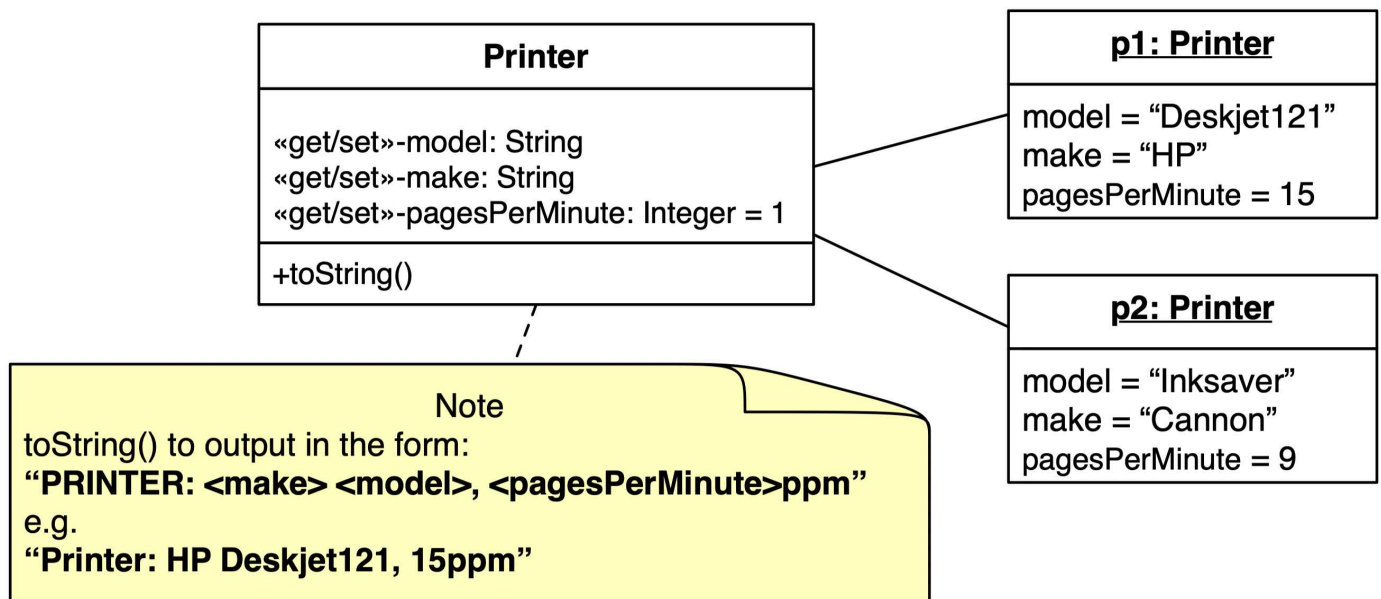PHP & Java Coding Test – **[[part 1 PHP – questions 1 and 2]]**

Internal Examiner(s)	Dr. Matt Smith

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.	**Submit two (2) ZIP files:** • **question1.zip** • **question2.zip**

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

Submit your answers to this question in folder: **question1/**

Printer

«get/set»-model: String
«get/set»-make: String
«get/set»-pagesPerMinute: Integer = 1

+toString()

p1: Printer

model = "Deskjet121"
make = "HP"
pagesPerMinute = 15

p2: Printer

model = "Inksaver"
make = "Cannon"
pagesPerMinute = 9

Note
toString() to output in the form:
"PRINTER: <make> <model>, <pagesPerMinute>ppm"
e.g.
"Printer: HP Deskjet121, 15ppm"

Qu. (1a) Write a PHP file **Printer.php** to:

- Implement the class shown in the diagram above
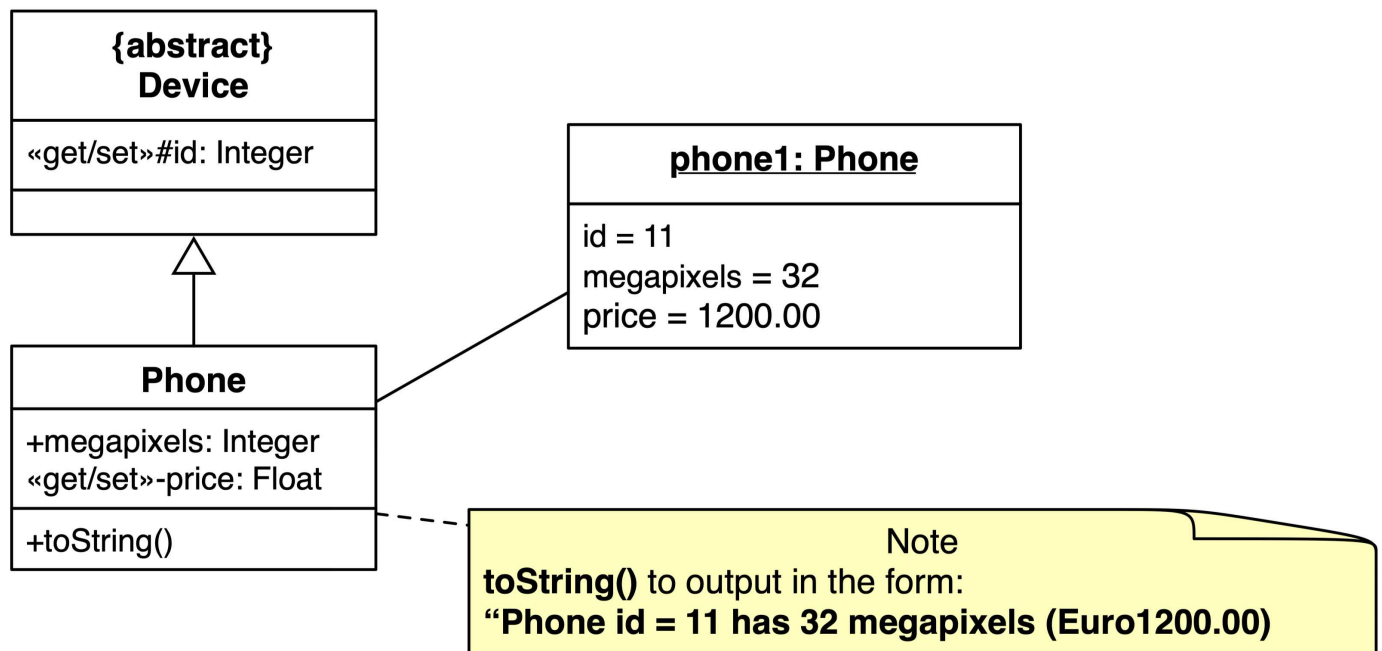
Qu. (1b) Write a PHP file **main.php** to:

- Create the objects from the diagram above
- Print out the details of the objects – the output should be:

```
$ php main.php

PRINTER: HP Deskjet121, 15ppm

PRINTER: Cannon Inksaver, 9ppm
```

Submit your answers to this question in folder: **question2/**

```
        {abstract}
          Device
─────────────────────
«get/set»#id: Integer
─────────────────────
```

```
        phone1: Phone
─────────────────────
id = 11
megapixels = 32
price = 1200.00
```

```
          Phone
─────────────────────
+megapixels: Integer
«get/set»-price: Float
─────────────────────
+toString()
```

Note
toString() to output in the form:
"Phone id = 11 has 32 megapixels (Euro1200.00)

Qu. (1a) Write PHP files to implement the classes in the diagram above

Qu. (1b) Write a PHP file **main.php** to:

- Create the object from the diagram above
- Print out the details of the object – the output should be:

```
$ php main.php

Phone id = 11 has 32 megapixels (Euro1200.00)
```