

# 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
Time of examination	Week 7 lab (second half)

COMP H2031: Object Oriented Analysis & Design

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

**SAMPLE PAPER – GIVEN TO STUDENS Oct 2021**

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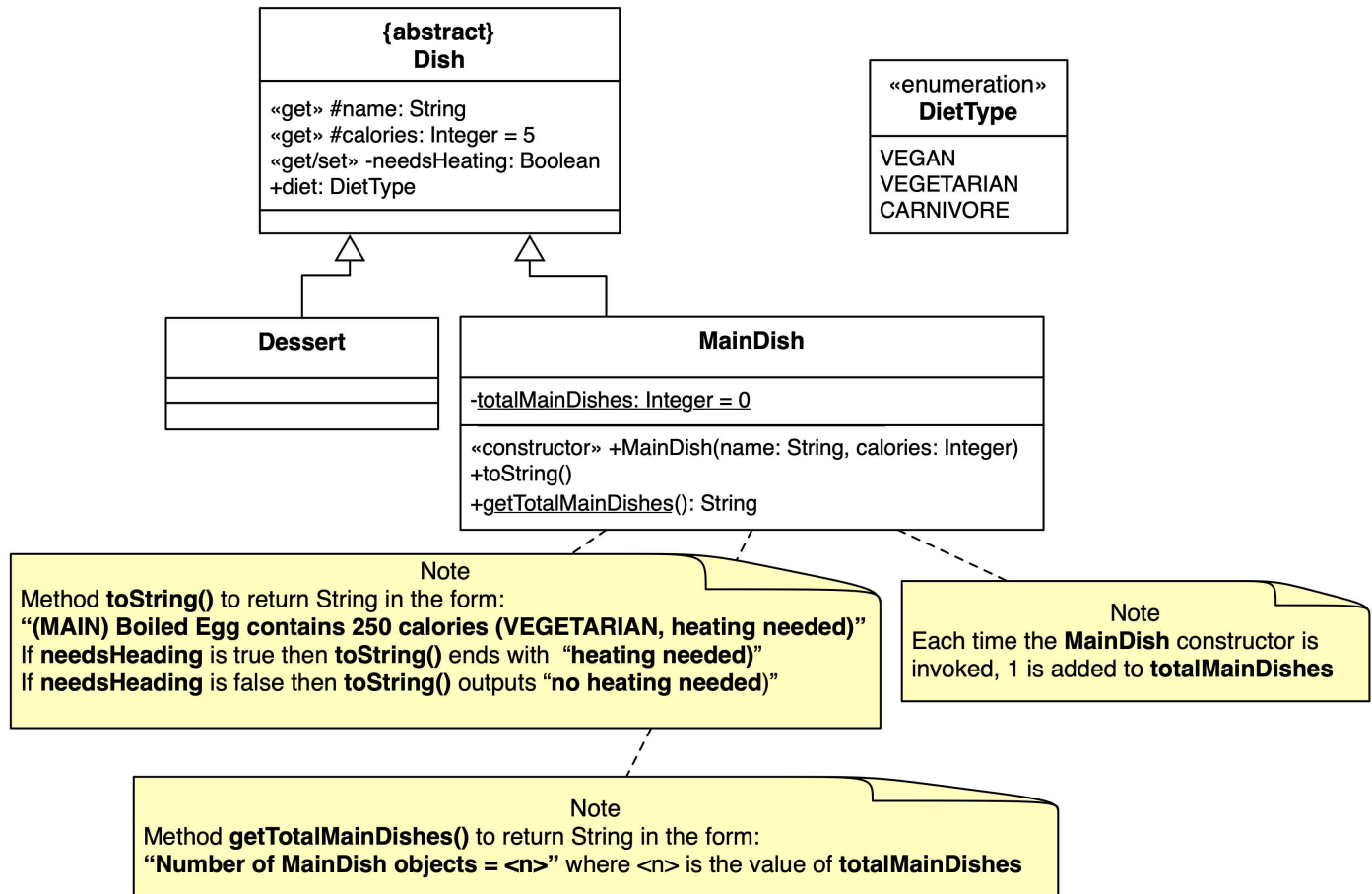
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#### Instructions to candidates:

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

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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:

- Print out the String returned by MainDish method **getTotalMainDishes()**
  - (should be zero)
- Create a **MainDish** object with the following properties:
  - name = Boiled Egg / needsHeating = true / calories = 260 / diet = VEGETARIAN
- Print out the details of the object – the output should be:
- Print out the String returned by MainDish method **getTotalMainDishes()**
  - (should be 1)
- Your program output should look as follows

```
$ java Main
```

```
Number of MainDish objects = 0
```

```
(MAIN) Boiled Egg contains 250 calories (VEGETARIAN, heating needed)
```

```
Number of MainDish objects = 1
```