**Ara Department of Computing**

**Graduate Diploma in Information and Communication Technologies**

**Bachelor of Information and Communication Technologies**

**Diploma in Information and Communications Technology**

**Diploma in Information Technology**

**BCSE101 – Software Engineering 1A**

**JavaScript Practical Test**

**Student Name:**

**CPIT ID Number:**

**NOTE: For the purposes of this test you may use textbooks, your notes and any electronic files that are in your area of the network.**



This test is worth 25% of the overall mark for BCSE101

This test has 4 pages including the cover sheet

***Note that for some questions it may be necessary to write an extra method over and above the method that is asked for.***

Copy the zip file contained the test’s directory (and all sub-directories) from Moodle onto your local drive. Unzip all directories and files.

1. Four classes have been created in this project. Draw a class diagram in the space below showing the classes (including their attributes and methods) and relationships.

(1 mark)

1. In the setup method of the Controller class write code to create the following three Doctors using the addDoctor method that exists in the Hospital class

ID Last Name First Name Office Fees

11 Xu Jian N400 $50

13 John Emily W7 $25

1. Kumar Santosh A22 $40

(2 marks)

1. Write a getDoctors method for the Hospital class that displays all the Doctors.

The required output is:

11 - Xu Jian.

12 - Kumar Santosh.

13 - John Emily.

***NOTE: Punctuation and spacing and ORDER must also be as shown above.***

(3 marks)

1. Write an addPatient method for Doctor class that can be used to create a new Patient. NB. You will need to add some code in the Patient class as well.

(4 marks)

1. In the setup method of the Controller class write code to create the following Patients, using the addPatient method that has been created previously.

***NOTE You will have to use the findDoctor() in the Hospital class***

ID Last Name First Name Fees Owing Doctor ID

200 Fisher Shelley 0 11

400 Koirala Kimi 25 12

300 Chen Liang 40 12

500 Ahmed Riyaz 0 13

1. Knightly Jude 30 11

(5 marks)

1. Write a **Boolean** get method named getPaidStatus for the Patient class that returns true if the FeesOwing is 0 and false otherwise.

(2 marks)

1. Write a getBillablePatients method for the Hospital class that first lists the doctors and then lists underneath the full names of each patient who has not paid the doctor’s fees.

This method must call the method created in previous question.

You will need to add several new methods in assorted classes.

The required output is:

11 - Xu Jian.

Knightly Jude

12 - Kumar Santosh.

Chen Liang

Koirala Kimi

13 - John Emily.

(6 marks)

**HOW TO SUBMIT YOUR COMPLETED TEST**

* When you have finished the test, send ALL \src files to the digital drop box on Moodle.
* You must check with one of the tutors that this has been done properly before you leave the room.
* If your work has not been loaded into digital drop box while you are in the room your test will not be marked.