



Computer Science 2A

Practical Assignment 02

2016-02-23

Time: Deadline — 2016-02-23 16h30

Marks: 50

This practical assignment must be uploaded to eve.uj.ac.za **before** 2016-02-23 16h30. Late or incorrect submissions **will not be accepted**, and will therefore not be marked. You are **not allowed to collaborate** with any other student.

Good coding practices include a [proper coding convention](#) and a good use of [JavaDoc comments](#). Marks will be deducted if these are not present. Every submission **must** include a batch file. See the reminder page for more details.

The Java Development Kit (JDK) has been installed on the laboratory computers along with the [Eclipse](#) Integrated Development Environment (IDE).

This practical aims to familiarise you with JavaDoc commenting, UML class diagrams and packages.

Using the classes that were created in Practical01 complete the following:

1. Place the **UJString** and **EncryptedString** classes into the **acsse.csc2a.practical02** package.
2. Provide full source comments for the **UJString** and **EncryptedString** classes.¹
3. Provide full JavaDoc comments for the **UJString** and **EncryptedString** classes.
4. Create UML class diagrams for the **UJString** and **EncryptedString** classes.²

¹Hint: inline code comments

²Hint: remember to submit as PDF.

Marksheet

1. UML class diagrams	[05]
2. Packages	[05]
3. Source comments	[05]
4. JavaDoc comments	[10]
5. Coding convention (structure, layout, OO design)	[05]
6. Correct execution	[20]

NB

Submissions which **do not compile** will be capped at 40%

Execution marks are awarded for a correctly functioning application and not for having some related code.

Reminder

Your submission must follow the naming convention as set out in the general learning guide.

SURNAME_INITIALS_STUDENTNUMBER_SUBJECTCODE_YEAR_PRACTICALNUMBER

Example

Surname	Berners-Lee
Initials	TJ
Student number	209912345
Module Code	CSC2A10
Current Year	2016
Practical number	P00

Berners-Lee_TJ_209912345_CSC2A10_2016_P00

Your submission must include the following folders:

- **bin** - (*Required*) Should be empty at submission but will contain runnable binaries when your submission is compiled.
- **docs** - (*Required*) Contains the batch file to compile your solution, UML diagrams, and any additional documentation files. Do not include generated JavaDoc.
- **src** - (*Required*) Contains all relevant source code. Source code must be places in relevant sub-packages!
- **data** - (*Optional*) Contains all data files needed to run your solution.
- **lib** - (*Optional*) Contains all libraries needed to compile your solution.

NB

Every submission **must** include a batch file. This batch files must contain commands which will compile your Java application source code, compile the associated application JavaDoc and run the application. **Do not** include generated JavaDoc in your submission. All of the classes/methods which were created/updated need to have JavaDoc comments.