



Computer Science 2B

Practical Assignment 03

2016-08-23

Deadline: 2016-08-30 12h00

Marks: 100

This practical assignment must be uploaded to eve.uj.ac.za **before** 2016-08-30 12h00. Late or incorrect submissions **will not be accepted**, and will therefore not be marked. You are **not allowed to collaborate** with any other student.

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

This practical will focus on retrieving mail from a mail server using POP3.

Create a GUI based Java application which will act as a mail client server. When the application starts up the user must be presented with a login window which asks for a username and password. This username and password will be used to authenticate the user to access the POP3 mail server. Refer to the [POP3 protocol](#) for information on how this is done. Communication with the mail server occurs on port 110. After the user has logged in another window will show the available mail on the server for the user. If a user selects a mail then the details of that specific mail must be shown. Any errors which occur must be displayed to the user, in a user friendly manner.

Testing of the mail client will need to be setup if done outside of the practical sessions. Refer to [Mercury Mail](#) for a mail server which can be used for testing. Mercury Mail is not a requirement!

Marksheet

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|---|------|
| 1. Create Socket on port 110. | [5] |
| 2. User can login over POP3. | [10] |
| 3. User can get a list of mail. | [10] |
| 4. User can retrieve details for a single mail. | [10] |
| 5. Coding convention and commenting. | [10] |
| 6. GUI | [10] |
| 7. Correct compilation | [20] |
| 8. Correct execution | [25] |