EBU4201 (2023/24): Introductory Java Programming

Lecturers	Teaching Blocks	Student Classes
Dr Habiba Akter (*) ✉: h.akter@qmul.ac.uk	1+2 3+4	01-05 and 06-07
Dr Paula Fonseca ✉: paula.fonseca@qmul.ac.uk Dr Chao Liu ✉: c.liu@qmul.ac.uk	1+2 3+4	8-10
Dr Paula Fonseca ✉: paula.fonseca@qmul.ac.uk Dr Manolis Chiou ✉: m.chiou@qmul.ac.uk	1+2 3+4	11-13 and 14-16
Dr Vindya Wijeratne ✉: vindya.wijeratne@qmul.ac.uk Dr Jingqi Liu ✉: jingqi.liu@qmul.ac.uk	1+2 3+4	17-20 and 21-24

Labs and other coursework will be supported by several **Demonstrators**.

(*) Module Organiser

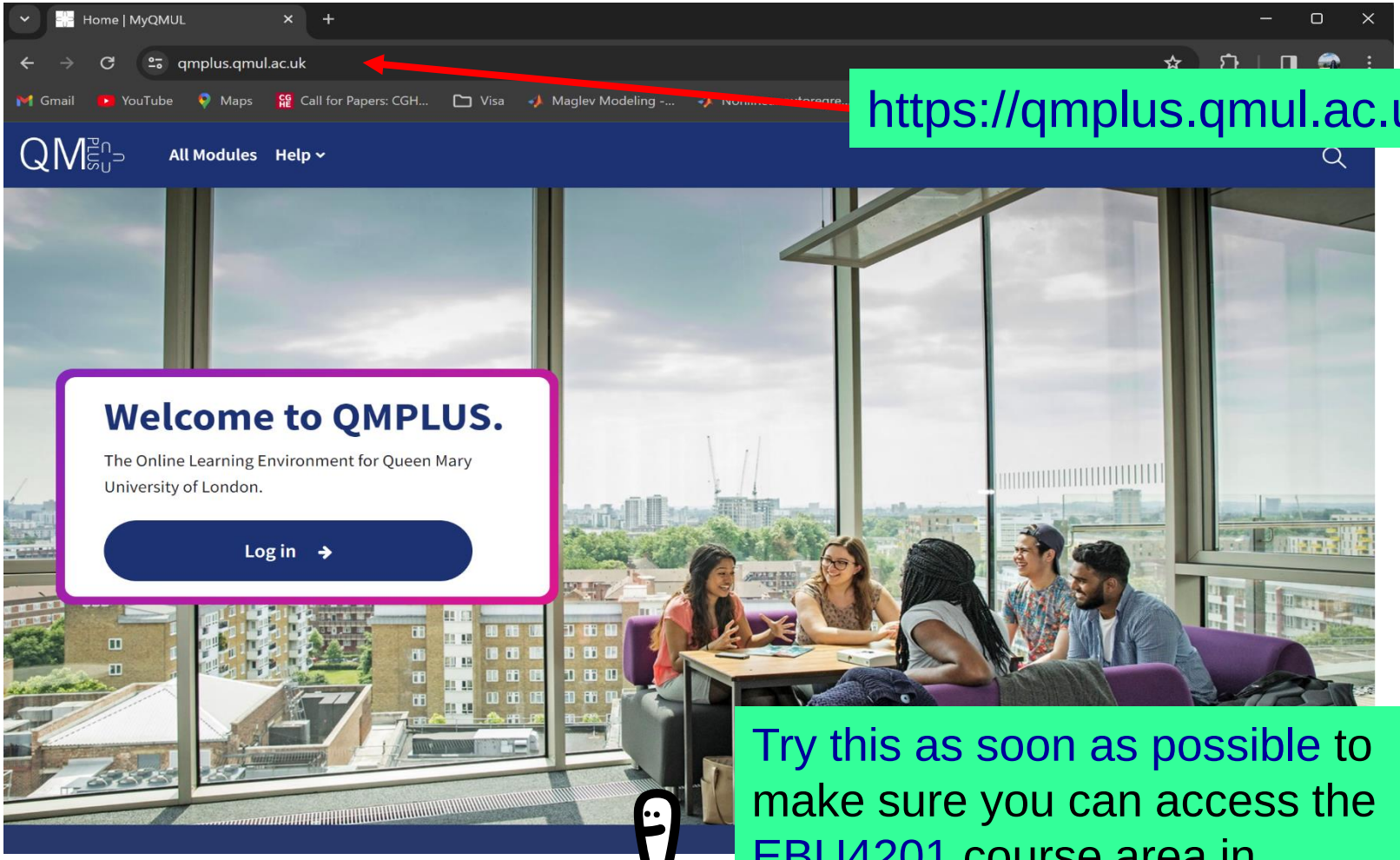
Important Module Information (1/5)

- Course website:
  - Login to QMPlus → https://qmplus.qmul.ac.uk
    - Use your *QMUL account*
  - Course Area: EBU4201 – Introductory Java Programming – 2023/24
  - Check it regularly, as we will put there information related to, e.g. *extra practice exercises*

- Email:
  - You are expected to check your QMUL email account every week!
  - You can link your QMUL email account to your BUPT account

Emails sent to lecturers must be only from your **official** student email accounts (jp21xx22xxx@qmul.ac.uk or 21xx22xxxx@bupt.edu.cn); emails from other accounts are ignored.

Important Module Information (2/5)



https://qmplus.qmul.ac.uk

Try this as soon as possible to make sure you can access the EBU4201 course area in QMPLUS!!!

Important Module Information (3/5)

- Message board:
  - Use the Student Forum activity in the EBU4201 course area
  - This is for all general questions related to the module [BUT *no personal questions please*]
  - Check existing discussions in the forum, before posting a new question
  - You must not post code on the Student Forum

The Student Forum is the primary way of communication in this module.

- Feedback:
  - Please give feedback to lecturers, either during or straight after the live sessions (by using the Student Forum on QMplus)
  - Do not wait until the next **SSLC** meeting

SSLC = Student-Staff Liaison Committee

Important Module Information (4/5)

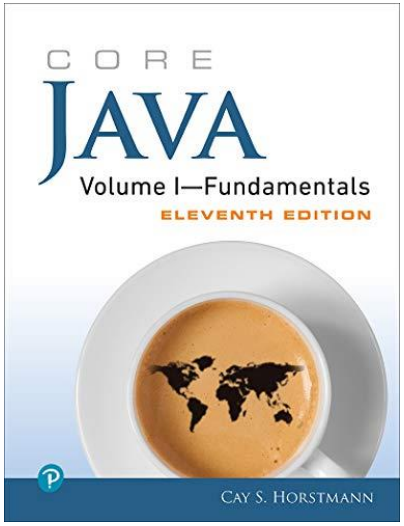
- Lecture sessions: sets of 45 minutes *each teaching block*
  - Format:
    - Live → in classroom via MS Teams; feel free to bring your laptop/tablet for interaction during the session
    - Face to Face → in classroom on campus

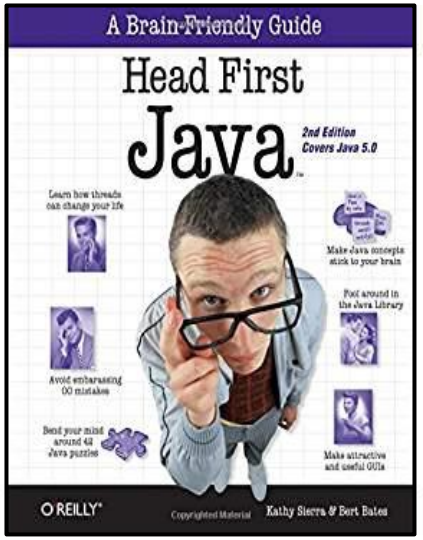
    Please note that the lectures will not be recorded

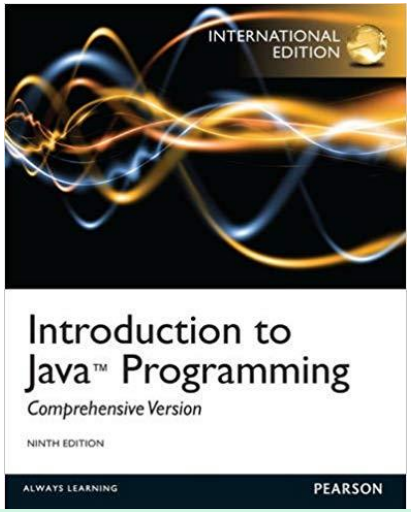
- Tutorial/Office Session: 45 minutes *each teaching block*
  - Format:
    - During the session, (a subset of) the previously provided Practice Exercises is used for discussion and revision of the topics covered
    - This is also an opportunity for students to ask questions about the teaching block topics
    - Recommendation: Make sure you participate in your scheduled Tutorial/Office Hour session to understand the exercises and their solutions

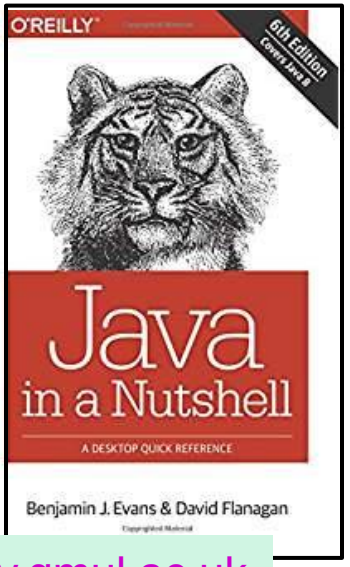
Important Module Information (5/5)

- Lecture Notes:
  - Available in QMplus a few days before Lectures
  - Get them from the Teaching Block x topic of this course area in QMplus
- Recommended Textbooks:
  - Details: see topic Important Module Information of this course area in QMplus
- Other Reading Resources:
  - See the **Recommended Reading** and **Useful Resources** sections, inside each of the Teaching Block x topics of this course area in QMplus









Use QMUL's digital library at https://www.library.qmul.ac.uk to search for (and access) **e-books**.

Queen Mary University of London

Module Aims and Objectives

- The module provides:
  - an introduction to Object Oriented Programming using Java
  - an introduction to practical programming skills

- The module aims to give each participant:
  - knowledge of the basic concepts of programming in an object-oriented language
  - knowledge of the basic features of the Java programming language
  - practice in developing simple object-oriented programs
  - solid foundation to successfully take module EBU6304 (Software Engineering) in year 3

Module Syllabus

- Teaching Block 1
  - Basic history of Java
  - Basic Java constructs
  - Introduction to Object-Oriented (OO) Programming
  - OO Examples
- Teaching Block 2
  - Arrays
  - Designing and Writing a Java Program
  - Inheritance
  - Abstract Classes
  - `Object` class
- Teaching Block 3
  - Interfaces - 26
  - Basic GUI – 44
  - Garbage Collection (GC) - 30
- Teaching Block 4
  - Numbers and Strings – 38 + 28
  - Exceptions and Assertions - 36
  - File I/O - 22
  - Collections and Sorting - 21

GUI = Graphical User Interface

Module Assessment Components

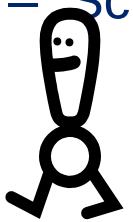
- 60% Final Examination
  - Total of 4 compulsory questions from **all** the topics covered in the lectures
  - Duration: 2 hours
- 40% Coursework, made up of:

Mid-Term Test (Teaching Blocks 1+2, Labs 1+3)	15%
End-of-Term Test (Teaching Blocks 3+4, Labs 5+7)	15%
Mini Project	10%

- 4% **Bonus** marks!!

Assessment: Mid-Term Test & End-of-Term Test

- Set of multiple choice questions including a mixture of theoretical and programming questions from the lecture topics.
- Mid-Term Test:
  - Scope: Topics from Teaching Blocks 1+2 and Labs **1+3** (questions asked directly about the lab exercises)
  - Duration: 60 minutes.
  - Schedule: Check QMPlus
- End-of-Term Test:
  - Scope: Topics from Teaching blocks 3+4 and Labs **5+7** (questions asked directly about the lab exercises)
  - Duration: 60 minutes.
  - Schedule: Check QMPlus



IMPORTANT [Applies to the Mid-Term and End-of-Term Tests]

1. Each test is completed individually in QMplus.
2. After each test, students get automatic feedback based on the questions they answered incorrectly.
3. Review requests can be made within the provided deadlines.

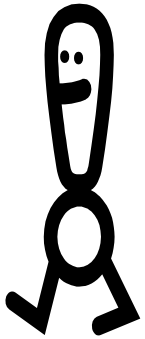
Assessment: Labs & Mini-Project

Lab work is not submitted.

- 8 Lab Experiments: Executed individually during an expected 2 hours timeslot
  - The allocated lab timeslot may not be sufficient – you will likely have to spend extra time each week working on your code
  - Do not work as a group – it is important that each student understands the exercises themselves
  - Labs **1**+**3**+**5+7** are assessed; as part of MTT and ETT.
- Mini-Project: + you get feedback
  - Students are given a problem specification, from which they design and implement a Java application, that must satisfy all the requirements in the problem specification
  - Executed individually by each student (over a 2.5 weeks period), and submitted via QMplus
  - Individual feedback provided via a marking sheet

Module: Regulations (1/2)

- Applying for Extenuating Circumstances (EC) if you miss an assessment:
  - Students must submit claims as soon as possible (by filling in a form), and at the latest:
    - For coursework: within 7 days of that coursework's deadline.
    - For examinations: within 14 days of the examination.
  - Claims submitted after this deadline will NOT be considered.
  - Information about ECs is in QMplus in the "JP/JEI Student Information Centre" at (https://qmplus.qmul.ac.uk/course/view.php?idnumber=BUPT-Home).



Examples of things that are not ECs:

- planned holidays;
- job interviews;
- GRE or IELTS preparation or test;
- misreading timetables;
- computer problems;
- not being aware of rules or procedures.

Module: Regulations (2/2)

- To pass the module, you need to:
  - Pass the Coursework (i.e., achieve a ≥ 30% mark, in QMUL scale)

    AND
  - Your combined (Exam + Coursework) mark must be ≥ 40%, in QMUL scale
  - Attention: If you fail the Coursework, then you fail the module regardless of your Exam mark

- Additional Information:
  - Please consult your “Student Handbook”.

Plagiarism is strictly forbidden!

- What is it?
  - The reproduction of ideas, words or statements of another person without appropriate acknowledgement.
  - Examples:
    - A student knowingly permits another to turn in his/her work.
    - Presenting someone else's work as your own, without giving due credit.
- All students must complete their own work and are expected to behave with integrity at **all** times.

Plagiarism is strictly forbidden; *there are severe penalties* when detected! More information about this is in your Student Handbook.

Ground Rules: Lecture and Tutorial Sessions

- Arrive on time for the session!
- Participate by asking productive questions.

- *If you do not understand something said during a lecture or tutorial*:
  - Ask the lecturer by raising your hand OR
  - Make use of Mentimeter (details will be provided at the session start) to type your question OR
  - Post your question to the Student Forum in QMplus afterwards.

How to Succeed

To succeed, you MUST …

- Do all the exercises (from lectures, tutorials, labs) by yourself
- "Attend" all lectures and labs
- Read books and the teaching materials in QMplus
- Do additional practice exercises
- Remember to access QMplus at least once per week, to check for news/updates
- ASK! (Lecturers and Demonstrators)
- Aim to fully understand new concepts

How to Fail

You WILL fail if you …

- Relax too much
- Don’t assimilate the material covered in lectures
- Don’t attend labs
- Don’t ask for help
- “Borrow” from “others”: they can’t help you in the exam