EBU4201 (2018/19): Introductory Java Programming

LECTURERS

Student Classes **01 – 10**

Teaching Weeks 1+3+4

Dr Paula Fonseca ✉: paula.fonseca@qmul.ac.uk (Module Organiser)

Teaching Week 2

Dr John Woodward ✉: j.woodward@qmul.ac.uk

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

Student Classes **11 – 22**

Teaching Weeks 1+3

Dr John Drake ✉: j.drake@qmul.ac.uk [classes **11 – 16**]

Prof Simon Colton ✉: s.colton@qmul.ac.uk [classes **17 – 22**]

Teaching Weeks 2+4

Dr Gareth Tyson ✉: g.tyson@qmul.ac.uk

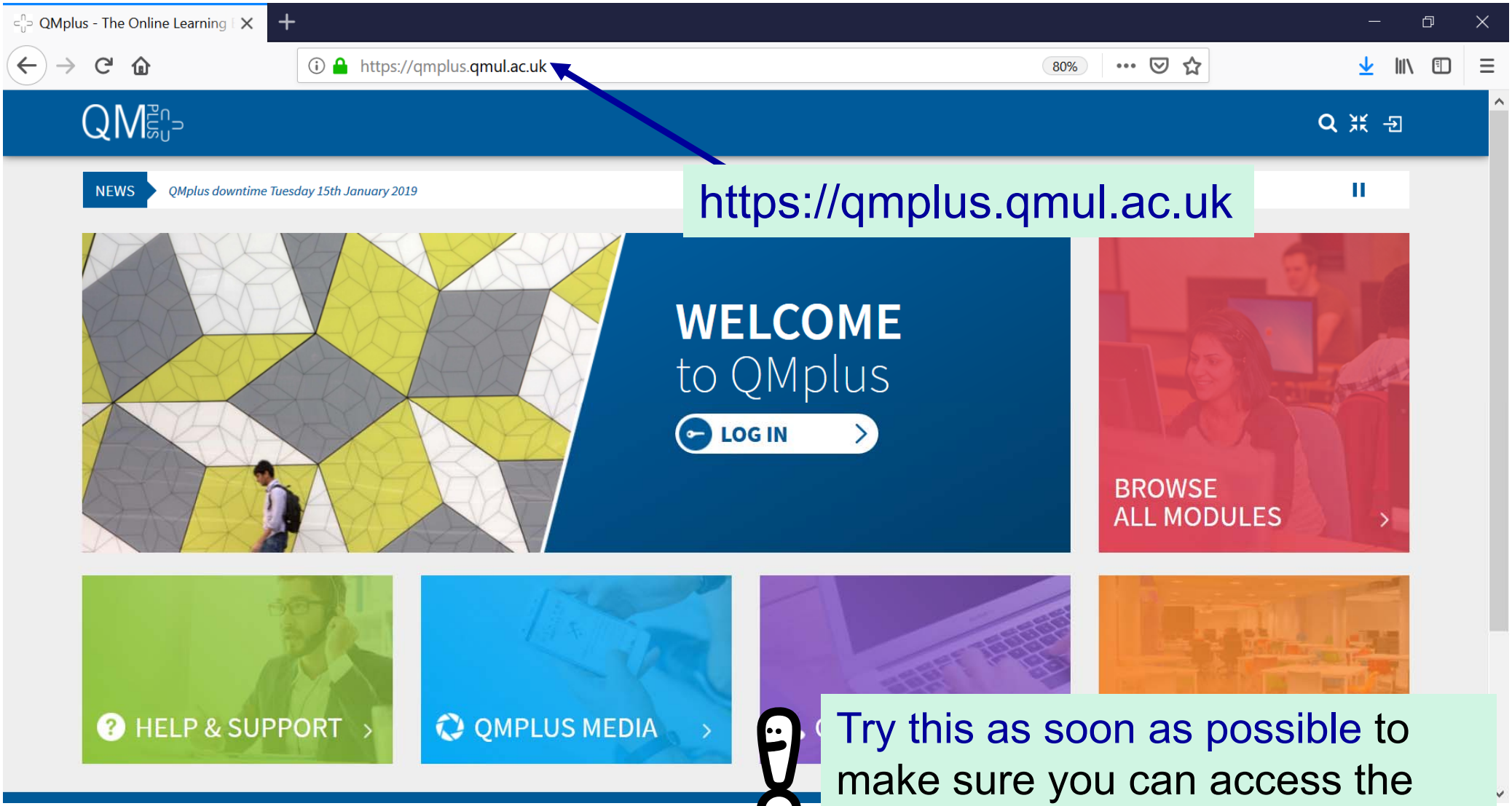
Important Course Information (1/5)

- Course website:
  - Login to QMPlus → http://qmplus.qmul.ac.uk
    - Use your *College account*
  - Course Area: EBU4201 – Introductory Java Programming – 2018/19
  - 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 QMUL or BUPT student email account; emails from other accounts are ignored.

Important Course Information (2/5)



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

Important Course Information (3/5)

- Message board:
  - Use the Message Board 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 Message Board forum

The Message Board forum is the primary way of communication in this module.

- Feedback:
  - Please give feedback to lecturers during or straight after the lecture
  - Do not wait until the next **SSLC** meeting

Module Reps, please!!

SSLC = Student-Staff Liaison Committee

Important Course Information (4/5)

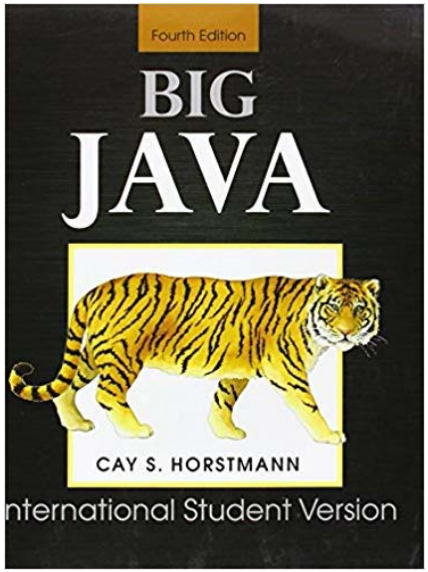
- Tutorial: 1 hour *each teaching week*
  - Format: A set of pre-prepared questions by the lecturer is covered
    - *If you want specific questions to be covered in the Tutorial*, you must submit them (using the course's Message Board forum) in advance
  - Exercise solutions will not be provided in QMplus; make sure you participate in your scheduled Tutorial session to understand the exercises and their solutions

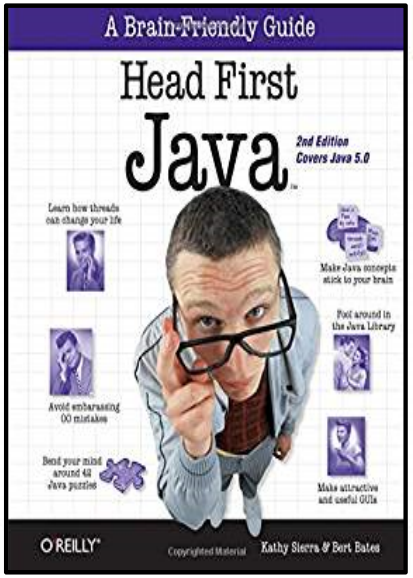
- Office Hour: 1 hour *each teaching week*
  - Format: Students can ask questions to the lecturer on a 1-to-1 basis
  - Schedule of Office Hours: see the **MODULE INFO** block (*) in the EBU4201 course area in QMplus

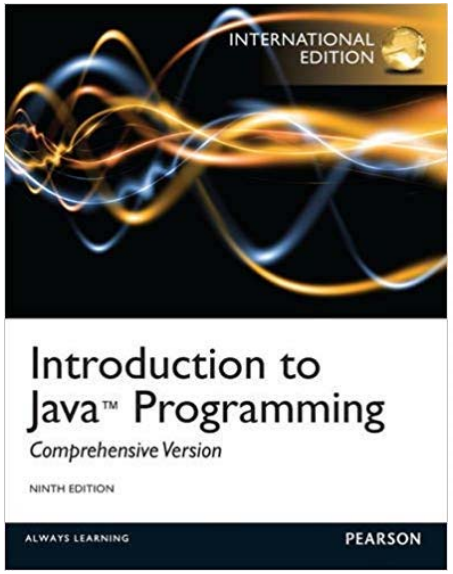
(*) Top right hand side of the main page.

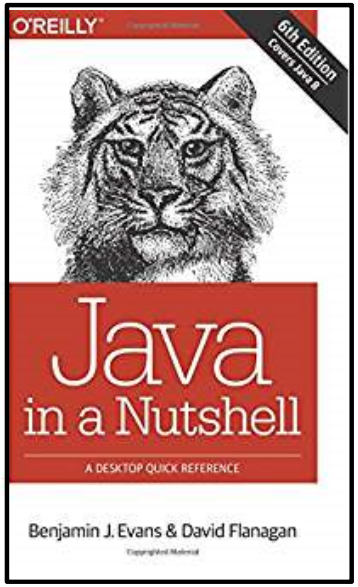
Important Course Information (5/5)

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









Course Aims and Objectives

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

- The course 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 EBU5304 (Software Engineering) in year 3

Course: Table of Contents

- Week 1
  - Basic history of Java
  - Basic Java constructs
  - Introduction to Object-Oriented (OO) Programming
  - OO Examples
- Week 2
  - Arrays
  - Designing and Writing a Java Program
  - Inheritance
  - Abstract Classes
  - `Object` class
- Week 3
  - Interfaces
  - Garbage Collection (GC)
  - Numbers and Strings
  - Basic GUI
- Week 4
  - Advanced GUI
  - Exceptions and Assertions
  - File I/O
  - Collections and Sorting
  - Packaging
  - Overall revision

Assessment: Course Mark 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:

Multiple Choice Test 1 (Labs 1-4 & Weeks 1+2)	12.0%
Multiple Choice Test 2 (Labs 5-8 & Weeks 3+4)	12.0%
Question Demonstration from Lab 1	2.0%
Question Demonstration from Lab 3	2.0%
Question Demonstration from Lab 6	2.0%
Mini-Project	10.0%

Coursework: Labs & MCQs

- 9 Lab Experiments: Executed individually in the computing lab, under the supervision of lab **Demonstrators**, during a 2 hours timeslot
  - The 2 hours allocated for each lab 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 each exercise themselves
  - Labs **1+3+6** are assessed; you need to show your code and answer questions about it, to a Demonstrator in the lab

    + you get feedback from Demonstrators

- 2 MCQs: Executed under examination conditions, invigilated by the **Demonstrators**
  - Questions include a mixture of: **a)** theoretical questions (from the lecture topics) and **b)** lab-based questions.
  - Duration: 1 hour

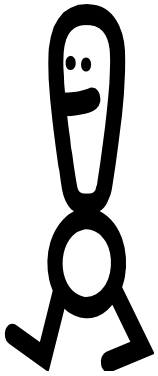
MCQ = Multiple Choice Questionnaire

Coursework: Mini-Project

- What:
  - Students are given a problem specification
  - Students design and implement a Java application, that must satisfy all the requirements in the problem specification
- How:
  - Executed individually by each student, and submitted via QMplus
  - Individual feedback provided via a marking sheet
- Duration: approx. 3 weeks

Course: Regulations (1/2)

- Applying for Extenuating Circumstances (EC):
  - 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 7 days of the examination.
  - Claims submitted after this deadline will NOT be considered.
  - Information about ECs is in QMPlus in the "JP Student Common Area" (http://qmplus.qmul.ac.uk/course/view.php?id=2078).



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.

Course: Regulations (2/2)

- To pass the course, 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 course regardless of your Exam mark

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

"Ground" Rules

- No mobile phones – even on silent
- No food
- Minimal dancing or singing in class
- No pets allowed (unless they are cute)
- Arrive on time

- *If you do not understand a point*:
  - Raise your hand and ask me to explain OR
  - Use the Message Board forum and/or Office Hour after the lecture.
  - TRY TO BE INTERACTIVE!

How to Succeed / How to Fail

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

You WILL fail if you …

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

Questions?
Feel free to ask now!