

Title **OO Web application for Exe River Publications**

Module Code **SOFT251**

Module Title **Object-oriented programming**

Weighting **70%**

Submission details

One zip file to be submitted via the link provided on your course VLE page. Zip file to contain

- **Netbeans project**
- **A reflective report**
- **JavaDoc web site**
- **A user guide for the assessor and link to git repository**

Submission date **13 May 2019 23:55**

Feedback

Provisional Marks and feedback will be provided to you within 20 working days and by **7 June** 2019 via VLE.

Final marks will be confirmed at the Subject Assessment Panel meeting in July following UoP and External Examiner moderation.

Late submission, extenuating circumstances and plagiarism

Further information regarding Assessment Regulations University of Plymouth can be found at the end of this assignment.

Module Learning Outcomes

ALO-1: Specify and document the design of an object-oriented web application for a given scenario.

ALO-2: Discuss the applicability of common design styles or patterns to a given software development project.

ALO-3: Implement a web application using an object-oriented language (Java) and evaluate the implemented solution.

Scenario

Exe River Publications is a Devon publishing company. You have been asked to produce a system to manage the process of bringing a book to publication, from first draft chapters, to the final manuscript ready to be printed. The system is to be used by authors, agents, professional reviewers, editors and the company administrator. Authors write the books, agents act on their behalf to find a publisher, professional reviewers decide which books can go forward for publication, editors work with the authors to finalise the text and the company administrator will keep track of the process using the application you are to produce. The process to be managed is as follows.

- An agent approaches Exe River Publications with an author's manuscript of a book asking for the book to be published.
- The administrator creates accounts for the author and the agent, registers the book and assigns two professional reviewers to read the manuscript.
- The professional reviewers record their comments and ratings and either reject or accept the book.
- At this stage, an editor is assigned to the book and an advance payment is agreed with the author and agent.
- The book then goes through a number of revisions until the final manuscript is agreed between the author and the editor.
- At this stage, payment is completed and the manuscript is sent to be published.
- At each stage there is a telephone or face-to-face meeting and a brief record of this is to be stored on the system.
- All meeting notes and change of status is notified to the author or agent when they next access the system.
- The administrator manages the system in consultation with the Editor-in-Chief.
- Data must be saved automatically.

This specifies a prototype application but the application should be designed with extended functionality in mind. For example, in future, the system could manage and monitor the printing process or record additional contact details for the author.

Authors and agents have read only access, but the author can upload a new version of their manuscript (initially this can just be to record the filename and location of the document).

Functionality	User
Login using unique id and password	All
Able to upload revisions	author
Able to read feedback	All except administrator

Able to view feedback history	All except administrator
Able to view payment history and advances	All except reviewers
Create, delete accounts	Administrator
Allow publication to proceed to next stage	Reviewers and Editor
Approve payments	Administrator
Able to submit feedback and star rating	Reviewers and Editor
Record notes from a meeting or telephone conversation	All except author/agent

As a minimum, all users should have a name, a surname, an address, and a unique identification number (which will be assigned when an account is created).

All requests or notifications for a specific user must appear as a message to the user when they log in.

For assessment purposes, please populate the system with an administrator, two editors, three authors, and four reviewers. Also, populate with ten books.

Task 1

25 marks

Create a UML class diagram for your planned application.

Plan JUnit tests to ensure that the application meets user requirements.

Task 2

50 marks

Set up GitHub to manage version control and implement web-based application using test driven development techniques. Document the application using JavaDoc or equivalent.

Task 3

25 marks

Finally, you are required to write a short reflection on the design and implementation of your solution. There is no minimum word count for this section. You are expected to write no more than 1000 words. The reflection should cover the following:

- The design process leading up to the finally submitted system
- A description of the design choices made, and the motivations behind them
- A discussion of the degree to which the design meets good design criteria
- A discussion of any shortcomings that may exist in the submitted work, and how these might be addressed

Task 4

Write a short user guide to ensure that your assessor can use your application.

Marking Criteria

To achieve 40%

Solution must mostly meet the requirements
Use basic OO classes
Evidence of testing and correct results
Use MVC design pattern to produce a simple application
Use version control system github appropriately

To achieve 50%

Solution must meet requirements
Some use of more complex aspects of OO design such as inheritance, composition, software interfaces and abstract classes as appropriate
Use correct coding conventions
Some use of JavaDoc or equivalent

To achieve 60%

Solution must meet requirements
Some additional functionality has been added
Further use of more complex aspects of OO design such as inheritance, composition, software interfaces and abstract classes as appropriate
Use additional design patterns as appropriate
Use of JavaDoc OR JUnit tests (both are encouraged but may be only one is used effectively)

To achieve 70%

Apply good HCI principles to the user interface
Demonstrate wide range of uses of design patterns
Use of JavaDoc or similar
Use of JUnit tests or similar

Further information regarding Assessment Regulations University of Plymouth

Coursework must be submitted by the specified deadline, details of coursework submission will be published on the module Moodle site. Do not leave uploading your work until the time of the deadline as by the time your work is received onto the server it may well be marked as late.

Please note that the University enforces a **penalty system for work submitted after the published deadline** without valid extenuating circumstances. Computing and printing problems, late arrival for submission or queues will not be considered as valid extenuating circumstances (see University student handbook on the portal for details).

The late coursework policy states that work submitted up to 24 hours after the official deadline will receive a mark, but will be capped at the normal pass mark for that module. For the majority of undergraduate modules the cap will be 40%. Work submitted more than 24 hours after the official deadline will receive a mark of zero.

If you are found to have valid extenuating circumstances for late work, no capping will apply. Further information on extenuating circumstances can be found at

https://www.plymouth.ac.uk/uploads/production/document/path/7/7741/Extenuating_Circumstances_Policy_and_Procedures.pdf

Further information on the late coursework policy can be found in the Regulations section of the Student Handbook www.plymouth.ac.uk/studenthandbook

You should give due consideration to your personal time management to ensure that coursework is submitted in plenty of time prior to the deadline. This is of particular importance as you will be expected to manage both work and study as a part of your apprenticeship.

Extenuating Circumstances

If you encounter circumstances that you believe are affecting or have affected your ability to complete an assessment, you should complete an Extenuating Circumstances form and submit it to abigail.quinton@plymouth.ac.uk along with corroborating evidence.

Valid extenuating circumstances will not result in an adjustment to a mark; improvement to marks can only be achieved by re-assessment. Further details can be found at

https://www.plymouth.ac.uk/uploads/production/document/path/7/7741/Extenuating_Circumstances_Policy_and_Procedures.pdf

Assessment and Avoiding Academic Offences

As you should know from the [Academic Regulations](#), academic offences which includes plagiarism are considered to be unacceptable by the University. Every year, a number of students have their marks reduced and/or fail the modules concerned, and their activity

recorded in their files. You should note that University policy states that a second offence will result in a more severe penalty.

The definitions of offences given below and in the student handbook are fairly general. Some clarification may be helpful, especially in a subject area where during the **formative** part of the course, you may be encouraged to work together, and to help each other with problems that arise in your work on the various examples set week by week during the module. There are also group projects in which you take part, and in which we deliberately require you to work together as a team. In these we assess you, and/or allow you to assess each other, for your ability to collaborate and to share your ideas with other people, as you would expect to do in the real world of work for which you are being prepared.

The assessment offence regulations apply only to those assessments which contribute towards the award of credit (i.e. summative and not formative assessments). Where offences are identified in a formative assessment, these will be drawn to your attention by the module leader and you will be advised of the consequences of committing an offence in a summative assessment.

The problems arise when it comes to the **summative** assessments, i.e. those which count towards the marks you are awarded at the end of a module, where we need to get some measure of your **individual** ability to handle the ideas and skills that you have learned during the module. For this there can be no substitute for anything other than your own efforts for the work submitted.

We can consider a range of activities that run from commissioning (paying someone else to do the work!) through copying, collusion and collaboration including:

Not Acceptable

Direct copying without acknowledging the source (from someone else's work, from your course notes, from a source on the Internet, from a text book, etc. - see referencing guidelines below)

Paraphrasing or rewording other people's work without acknowledging the source (you must always give the reference from which your summary or paraphrase is taken)

Additions to other work (copied plus a few minor code changes, extra functions, comments, etc.)

Copying another student's work with or without their knowledge or agreement or allowing your work to be copied

Submitting work as an individual submission when the work was done in collaboration with another person(s)

Acceptable

Some initial discussion of the problem (before going away to do the real work yourself)

Help with minor difficulties (a little help when you are totally stuck, basically the same as we would give you if you came to a surgery)

Solo (your very own unaided effort, of which you are protectively proud!)

Only the last three of these are acceptable. Any evidence that collaboration or collusion with a friend has occurred, will be taken very seriously, and could lead in the first instance to you being awarded no marks for the work and hence failing the module, and in subsequent cases to being prevented from proceeding with/completing your programme of study. If you are stuck or need help you should approach the Module Leader.

You should ensure that any written work (reports, essays, etc.) is free from plagiarism and is adequately referenced typically using the Harvard System (see <http://staff.plymouth.ac.uk/refman/> for the University guidelines).

The University uses Turnitin, an originality checking service to help students develop best practice for using and citing other people's written material. Further information on Turnitin can be found on Moodle.

Further information on the regulations regarding assessment offences can be found:

<https://staff.plymouth.ac.uk/acregsc/acadregs/intranet.htm>

Information on examination assessment offences can be found:

<https://www.plymouth.ac.uk/student-life/your-studies/essential-information/exams/exam-rules-and-regulations/examination-offences>