Propose a vacation student project for Summer 2017

Deadline for making your proposal(s): 09:00 Monday 10 April. This is a hard deadline.

Please fill in and submit this form multiple times for multiple proposals. Any queries, do ask - Toby.

Project supervisor email *

suzanne.m.embury@manchester.ac.uk

Title and objective of the project *

Refreshing Our Software Engineering Teaching Materials

Number of students requested (with justification if more than 1) *

1

Start date, end date, total duration (weeks) *

12th June to 4th August (8 weeks)

The benefit to the School *

Our teaching materials will reflect the latest versions of the tools we use in COMP23311 and 33711, without requiring considerable staff time in order to recreate screen shots or adjust instructions ready for the new academic year.
The benefit to the student *

The student who undertakes this project will gain additional familiarity with the tools used, as well as experience in using agile project management techniques and tools (e.g. the project will make use of a Trello board for planning and progress tracking). Experience in developing teaching materials will also be gained.

Skills needed by the student *

Ability to work independently through a list of tasks.  
Attention to detail. 
Strong coding ability (in Python and Java) is an advantage.

Details of the work that the student would do *

This project involves assisting us to be ready for teaching two of our software engineering course units in the coming academic year: COMP23311 (Software Engineering I) and COMP33711 (Agile Software Engineering).

The student who undertakes the project will need to work through the current workshop activities for these course units, checking that they work with the updated tool versions that we will use for the new academic year, and making new screen shots/adjusting the wording of the instructions where there are any changes. This will involve working with GitLab, Jenkins, Ant, JUnit, Sonar Qube and Cucumber.

Since the amount of time needed for this will vary depending on how much the software tools we used have changed since last year, this project has an additional task, that can be expanded or reduced depending on how much work is needed for the course materials refresh. The second task involves helping us to expand the automated marking and feedback system for COMP23311, by creating new ways of automatically marking students' use of Git and GitLab, and other tools. This system is coded in Python, and involves using APIs to access the tools we use in teaching programmatically.

This second part of the project could involve researching the use of automated marking tools at other universities, and the design of novel automated marking methods.
Infrastructure requirements and any required staff support other than the project supervisor *

For this project to work, we will need to have the new versions of the tools we will use in AY2017/2018 installed and ready for the student to use by the start of the project. This will require the support of Chris Page and the TECHSO team.

Supervision arrangements throughout the duration of the project (named staff and dates covering the entire duration) *

The main supervisor will be Suzanne Embury, who will cover the duration of the project. Additional staff involvement from the COMP23311 and COMP33711 teaching teams may occur, as the different parts of the course materials are refreshed.

Location of the project work (building/room) *

The student will be expected to work in KB1.8 (unless a research desk is available)