Propose a vacation student project for Summer 2019

Deadline for making your proposal(s): 17:00 Friday 22 March 2019. This is a hard deadline.

This form is for one project proposal, so to propose multiple projects please submit a separate form for each project. Any queries, do ask - Toby.

Project supervisor email *

suzanne.m.embury@manchester.ac.uk

Title of the project *

Further Development of our Lab Troubleshooter Resource

Source of funding *

☐ School funding requested

☐ You have your own funding (e.g. research grant)

Objective of the project *

Last year, we created a lab trouble shooter resource for supporting our second year software engineering students. The goal of this project will be to maintain, improve and extend the lab trouble shooter resource, to make sure students can get the maximum benefit from it. We also need to link the lab trouble shooter to learning resources, further explaining the concepts behind the topics covered in the trouble shooter.

Number of students requested (justify if > 1) *

1
Start date, end date, total duration (weeks)*
10th June to 2nd August (8 weeks)

The benefit to the School*

The lab troubleshooter resource has the potential to both save staff time and increase student learning and independence. At present, technical and academic staff spend a lot of time dealing with common mistakes made repeatedly by students within and across cohorts. A significant portion of this time will be saved if students can be directed to the relevant section of the trouble shooter resource.

This project also includes time to refresh the COMP23311 teaching materials in the light of the software updates that have occurred over the previous year. New screenshots need to be created and instructions for using software need to be updated in places.

The benefit to the student*

The student taking this project will gain experience in creating structured learning resources of the kind commonly used for training software engineers in industry. The project will need creativity and the ability to place yourself in the position of students struggling with aspects of our coursework. It is also an opportunity to practice technical writing skills.

Skills needed by the student.*

Good programming ability, strong technical writing skills, creativity and problem solving.
Details of the work that the student would do *

The project will involve critically assessing our current trouble shooter, and proposing and implementing modifications and extensions that will increase its usefulness to students. A preliminary list of tasks is:

+ Work through the COMP23311 workshop activities and coursework instructions, checking whether the current trouble shooter instructions are still correct and complete.
+ From this, create a list of amendments/additions needed to the trouble shooter.
+ Implement the amendments/additions.
+ Seek feedback from other vacation students on the new trouble shooter resource.
+ Upgrade screen shots and instructions where tools have been upgraded since the teaching materials were last created. This includes screenshots embedded in the trouble shooter resource.
+ If time allows, we can experiment with creating a chatbot for troubleshooting on the more complex issues.
+ If time allows, we can explore other approaches to providing on-line technical support for students, at the suggestion of the student taking the project.

The project will be managed used agile methods.

Infrastructure requirements and any required staff support other than the project supervisor *

Chris Page's Media Wiki expertise may be needed for some parts of the work.

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

Suzanne Embury (covering entire project)

Location of the project work (building/room) NB projects must be on-campus *

KB1.8 (or other free lab)