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 *

carole.goble@manchester.ac.uk

Title of the project *

TeSS Concept Maps using Javascript

Source of funding *

- [ ] School funding requested
- [X] You have your own funding (e.g. research grant)

Objective of the project *

To develop the concept maps Javascript concept map implementation

Number of students requested (justify if > 1) *

1

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

3.6.19 to 30.8.19 (12 weeks)
The benefit to the School *
Contributes to one of our EU funded projects

The benefit to the student *
Real project experience and guidance in a team based environment

Skills needed by the student. *

- Javascript ES6
- Familiarity with API clients
- UX skills
- Ruby

Details of the work that the student would do *

ELIXIR TeSS (https://tess.elixir-europe.org, https://github.com/elixirteSS/tess) is an open source training portal that automatically aggregates training events and materials from an extensive collection of online training providers.

The aggregation aspect is accomplished by a collection of bespoke Ruby scripts to extract data from source sites. These use techniques such as HTML scraping, structured data parsing, and API interfacing. You will be required to maintain and extend this library.

TeSS has been developing a feature called Concept Maps. The idea is to abstract-out the typical steps from a data analysis pipeline to provide a step-based training material that links to resources and teaches a user the context and purpose of each stage. The concept maps use Javascript and are based off a visualisation library called CytoscapeJS.

Your role will be to develop this project further to a production level standard. It will involve writing code to interface with external APIs, designing and implementing UX-considered layouts, refactoring the codebase, and developing new features, as well as writing tests.
Infrastructure requirements and any required staff support other than the project supervisor *

A machine will be provided to work on, although they may prefer to work on their own laptop. You will be interacting with the eScience Lab team (https://esciencelab.org.uk/people/) but mainly interacting with Niall Beard

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

The duration will be covered by one or more of Niall Beard, Shoaib Sufi, Finn Bacall or Stuart Owen.

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

Room 1.17 Kilburn Building (Building 39 on the campus map)

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