**GhStat – what I would like it to do (JP)**

I would like to have a system which will allow me to specify the name of a GitHub repository, by exact name or by searching on a partial name, and see a list of the contributors to that repository. The repository might be public, or a private one belonging to my organisation (GCU has up to 10 private repos) or it might be a repository set up with a student GitHub account which I have been given access to by the student.

I should then be able to select a student and see a display of a set of statistics for that student. Statistics will be either a single value, calculated from data retrieved from the repo, or a set of information which has been retrieved from the repo. A single value statistic could be, for example something straightforward like the “number of commits”, or it could be something more complex which needs to be calculated (Brian’s “impact” statistic can be used as the example to work with initially). A set statistic could be anything multivalued, possibly textual, such as a set of commit messages – I would use these to make a subjective judgement and assign a score for that statistic. I would like as a user to be able to define new statistics derived the information which is available from GitHub.

I would like to be able to select the statistics to be shown from a predefined list of those which are available in the system, and how these are weighted to give an overall score for each student. I would like to be able to choose whether the final score is given as the actual score recorded or as a proportion of the maximum score within the group (so that the “best” student would have 100% and all the others less than that).