Jan 5, 2016

Dear AP Computer Science Student,

Code development, especially when working in a group, can quickly become a management challenge regarding the merging of files and preservation of revision history.  While working on projects over the next couple of weeks, you are encouraged to try Github.  Here is a brief description from Wikipedia:

**GitHub** is a Web-based [Git](https://en.wikipedia.org/wiki/Git_(software)" \t "_blank) repository hosting service. It offers all of the [distributed revision control](https://en.wikipedia.org/wiki/Distributed_revision_control" \o "Distributed revision control" \t "_blank) and [source code management](https://en.wikipedia.org/wiki/Source_code_management" \o "Source code management" \t "_blank) (SCM) functionality of [Git](https://en.wikipedia.org/wiki/Git_(software)" \t "_blank) as well as adding its own features. Unlike Git, which is strictly a [command-line](https://en.wikipedia.org/wiki/Command-line" \o "Command-line" \t "_blank) tool, GitHub provides a [Web-based graphical interface](https://en.wikipedia.org/wiki/Web_application" \o "Web application" \t "_blank) and desktop as well as mobile integration. It also provides [access control](https://en.wikipedia.org/wiki/Access_control" \o "Access control" \t "_blank)and several collaboration features such as [bug tracking](https://en.wikipedia.org/wiki/Bug_tracking_system" \o "Bug tracking system" \t "_blank), [feature requests](https://en.wikipedia.org/wiki/Software_feature" \o "Software feature" \t "_blank), [task management](https://en.wikipedia.org/wiki/Task_management" \o "Task management" \t "_blank), and [wikis](https://en.wikipedia.org/wiki/Wiki" \o "Wiki" \t "_blank) for every project.[[3]](https://en.wikipedia.org/wiki/GitHub" \l "cite_note-hugeinvestment-3" \t "_blank)

GitHub offers both plans for private [repositories](https://en.wikipedia.org/wiki/Repository_(revision_control)" \t "_blank) and free accounts,[[4]](https://en.wikipedia.org/wiki/GitHub" \l "cite_note-4" \t "_blank) which are usually used to host [open-source](https://en.wikipedia.org/wiki/Open-source" \o "Open-source" \t "_blank) software projects.[[5]](https://en.wikipedia.org/wiki/GitHub" \l "cite_note-5" \t "_blank) As of 2015, GitHub reports having over 11 million users and over 29.4 million repositories,[[6]](https://en.wikipedia.org/wiki/GitHub" \l "cite_note-6" \t "_blank) making it the largest host of source code in the world.[[7]](https://en.wikipedia.org/wiki/GitHub" \l "cite_note-7" \t "_blank)

We will provide a tutorial on Github tomorrow, and offer extra credit on Thursday's project for those who use it.

For tomorrow, please follow this general guide. You should at least have a Github account and git installed on your laptop. If you have any questions from this tutorial, we can discuss them in class.

Guide:

[http://lifehacker.com/5983680/how-the-heck-do-i-use-github](http://lifehacker.com/5983680/how-the-heck-do-i-use-github" \t "_blank)

This link is an interactive tutorial for Github. It is highly recommended that you do this(takes about 15 minutes), so you will be prepared for tomorrow's

Learning git commands:

[https://try.github.io](https://try.github.io/" \t "_blank)

http://readwrite.com/2013/09/30/understanding-github-a-journey-for-beginners-part-1

Regards,

Mr. B