Summary

During today’s practical you will evaluate the state of the computing discipline in the context of other disciplines and familiarize yourself with a Java project which may be beneficial for you in some way. You will create a report text document and include your answers to the outlined questions in it. Then, using the “git add”, “git commit”, and “git push” commands you should upload your report to your Git repository hosted by Bitbucket.

Read Assigned Articles and Review Textbook

Read an article on the place of computer science in a liberal arts setting, and optionally an article on the place of computer science in the curriculum. Be sure to review Sections 4.1 through 4.3 of your book to learn more about writing your own classes, constructors and methods.

Study an Existing Java Project

We discussed that all of the real world software consists of multiple interacting components (classes, packages, libraries). Online repository hosting platforms, such as GitHub, store millions of projects publicly, making them open source. For this portion of the practical you will find one new Java project on GitHub (this means, you can not select JFugue) and study its purpose and its code structure. Try to choose something that is interesting and could be beneficial to you. You can find a number of open source Java projects online. For example, you can enter a keyword ‘Java’ into GitHub Explore page: [https://github.com/explore](https://github.com/explore) to see many Java projects whose source code is available, or you can view top trending Java projects on [https://github.com/trending/java](https://github.com/trending/java).

As you browse through your selected project, please answer the following questions in your report:

1. What is the name of your selected Java project?

2. What is its purpose?

3. Describe the hierarchy structure of the project’s files. For example, you may consider the structure of the project’s package (i.e. its top directory), how the subdirectories are organized (is there a specific purpose for each subdirectory), where Java programs reside, etc..

Computing in Liberal Arts and in the Curriculum

For the second portion of the practical, you will read an article titled “Computer Science in the Curriculum” by Vint Cerf, which is available on:
This article discusses President Obama’s “Computer Science for All” program.

After you have read the article, in your report text document provide your feedback relating to the points specified below:

1. Describe 2-3 key points from the article.

2. Are there any connecting arguments to the article you read earlier in the semester on Computational Thinking?

3. Briefly explain your personal stand on the key points discussed in the article.

4. Briefly comment on the connections possible between the platforms, such as Github and the “Computer Science for All” initiative?

General Guidelines for Practical Sessions

- **Try to Finish During the Class Session.** Practical exercises are not intended to be the equal of the laboratory assignments. If you are simply a slow typist, I’ve given you until the end of the day, but ideally you should upload a file, even a non-working one, by the end of the class period.

- **Submit Something.** Your grade for this assignment is a “checkmark” indicating whether you did or did not complete the work and submit something to the Bitbucket repository using the “git add”, “git commit”, and “git push” commands.

- **Help One Another!** If your neighbor is struggling and you know what to do, offer your help. Don’t “do the work” for them, but advise them on what to type or how to handle things. If you are stuck on a part of this practical session and you could not find any insights in either your textbook or online sources, formulate an intelligent question to ask your neighbor, a teaching assistant, or a course instructor. Try to strike the right balance between asking for help when you cannot solve a problem and working independently to find a solution.

- **Update Your Repository Often!** You should add, commit, and push your updated files each time you work on them, always including descriptive messages about each code change.

- **Review the Honor Code Policy on the Syllabus.** Remember that while you may discuss your writing with other students in the course, text that is nearly identical to, or merely variations on, the work of others will be taken as evidence of violating the Honor Code.