
40071296 - DELIVERABLE2

A PREPRINT

Shivani Jindal

40071296

SOEN 6011

<https://github.com/ShivaniJindal/SOEN-6011-D1>

Software Engineering Processes

Department of Software Engineering and Computer Science

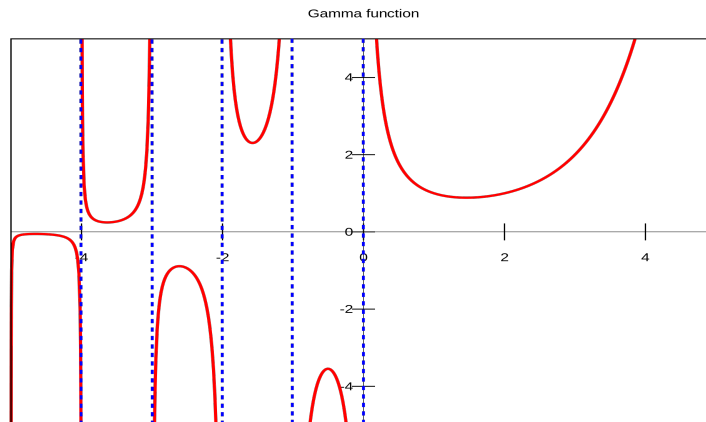
Concordia University

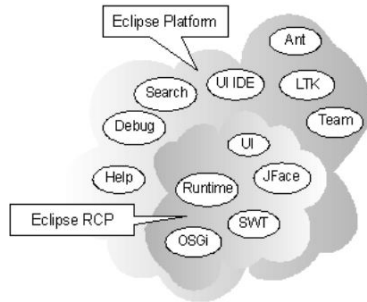
Montreal

<https://github.com/ShivaniJindal/SOEN-6011-40071296>

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$$\Gamma(z) = \int_0^{\infty} e^{-t} t^{z-1} dt$$





DEBUGGER

Advantages and Disadvantages.

The Eclipse Platform is designed for building (IDEs) integrated development environments, and arbitrary tools. The Eclipse Platform UI is built around a workbench that includes menu and tool bar actions for running and debugging arbitrary programs, and provides a generic debug perspective better suited to that task.

ADVANTAGES:-

- When a Java program is launched in debug mode, a debug view shows the processes, threads, and stack frames.
- During single stepping, the debugger instructs the editor which source code line to highlight. Debug-specific views show the list of breakpoints, the values of variables, and the fields of objects. Breakpoints are represented by a special type of marker.
- It don't require several recompiles for what might be a small problem and often allow debugger-time altering of the variables, which might be handy as well.

DISADVANTAGES:-

- Sometimes Eclipse can get into a bad state and one have to clear the caches and restart or go through elaborate build-clean-build processes to fix it.
- Eclipse run very slowly.



CHECKSTYLE

Advantages and Disadvantages.

Checkstyle is a development tool to help programmers write Java code that adheres to a coding standard. It automates the process of checking Java code to spare humans of this boring (but important) task. This makes it ideal for projects that want to enforce a coding standard.

ADVANTAGES:-

- Check many aspects of your source code such as it can find class design problems, method design problems.
- It has the ability to check code layout and formatting issues.
- Checks that the parts of a class or interface declaration appear in the order suggested by the Code Conventions for the Java Programming Language.

DISADVANTAGES:-

- Java code should be written with ASCII characters only, no UTF-8 support.
- To get valid violations, code have to be compilable, in other case you can get not easy to understand parse errors.
- You cannot determine the full inheritance hierarchy of type.
- You cannot see the content of other files. All files are processed one by one.

References

- [1] Eclipse Reviews. <https://www.trustradius.com/products/eclipse/reviews>
- [2] Software Engineering. <https://softwareengineering.stackexchange.com/questions/168540/what-are-the-advantages-of-using-the-java-debugger-over-println>
- [3] Eclipse Platform Technical Overview. *International Business Machines Corp*, 2006.
- [4] Checkstyle <https://checkstyle.sourceforge.io/> Version: 8.23, Last Published: 2019-07-27