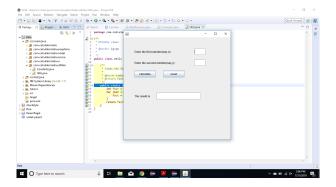
Deliverable #2

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Course: *SOEN6011* – Professor: *Dr. Pankaj Kamthan* Due date: *July 29th,2019*

Question 1

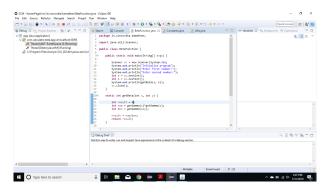
Which type of user interface is used?



Answer. Graphical

Question 2

Which debugger has been used?



Answer. Troubleshooting a method for recognizing blunders in your code by executing the code. We can check the accuracy of the code variable by factor. For our task we have utilized the in-assembled Debugger from Eclipse IDE.

Question 3

What are the advantages of using this debugger?

Answer.

- 1. Debuggers can do specially appointed review or modification of factors, code, or some other part of the runtime condition, while manual investigating requires to stop, alter, and re-execute the application (potentially requiring recompilation.
- 2. It made simpler to check the code due to the recognition of the IDE with the language information and The debugger associates with the libraries utilized.
- 3. Debuggers offer numerous approaches to lessen the time and tedious work to do practically any investigating undertakings.
- 4. Coding, recompiling and updating everything in same window using the IDE debugger makes it simpler for the software engineer.

Question 4

Disadvatages of JDT debugger:

Answer.

- 1. Investigating different code ways simultaneously not yields the turnaround with a debugger.
- 2. It is anything but difficult to lose direction in the multi-threaded haze when the debugger's breakpoints are being hit in one string at point A and a totally discrete string at point B.

Question 5

Endeavors in accomplishing the Quality Attributes:

1. Correctness

- (a) Application is tested thoroughly.
- (b) Junit test cases are also written to check the correctness.
- (c) Also performed acceptance testing by fellow colleagues.

2. Efficiency

- 3. Using Version Control on Git Repository.
- 4. Robustness
- 5. Use of proper error handling mechanism to cope with errors during execution to maintain application robustness
- 6. Usability

7. User friendly interface to access the functionality of application.

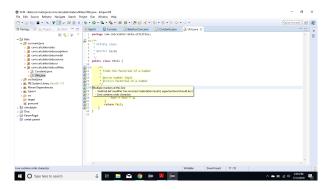
8. Maintainability

- 9. It's easy to maintain application using Git version control.
- 10. If proper versions of the application are maintained then its easy to revert back to previous versions.

Question 6

Answer.

Checkstyle Description, advantages and disadvantages



Brief description.

Checkstyle is an improvement instrument to enable software engineers to compose Java code that holds fast to a coding standard. It robotizes the way toward checking Java code to save people of this exhausting (yet significant) task. This makes it perfect for undertakings that need to implement a coding standard

Advantages.

- 1. The programming style received by a product advancement venture can guarantee that the code agrees to great programming rehearses which improves the quality, meaningfulness, re-convenience of the code and may decrease the expense of improvement.
- 2. Such instruments accompany readymade decides that help in keeping up code guidelines.
- 3. Checkstyle is profoundly configurable and can be made to help practically any coding standard.

Disadvantages.

- 1. The checks performed by Checkstyle are basically constrained to the introduction of the code while rightness or fulfillment of the code is not affirmed.
- 2. There's almost no documentation on the internals of code audit instruments, and not many instructional exercises tell the best way to make custom checks.

1. References

- (a) https://en.m.wikipedia.org/wiki/Checkstyle (60
- (b) https://stackoverflow.com/questions/426569/why-is-debugging-better-in-an-ide (45
- (c) https://github.com/kranonit/calculator-unit-test-example-java (30
- (d) http://functions.wolfram.com/ (75
- (e) https://www.latextemplates.com/ (45
- (f) https://ieeexplore.ieee.org/document/8559686 (10

2. Repository Address

https://github.com/karamveer28/soen-6011-project