Code examples are denoted in BOLD.

"Quotations" are denoted in ITALICS.

<u>Links</u> denoted in <u>blue underline</u>, appended with [FOOTNOTE#].

As a group, we've decided to adopt the Google Java Style Guide for two main reasons. Firstly, each member has previous experience with the Google Java Style Guide[1] Secondly, we agree with Google's Style guide philosophies of "optimization for the code reader, not the writer" and "mak[ing] it harder to do 'bad' things, and encourage 'good' things." [2] For the sake of our teammates and markers, creating code that is easily read is both for reducing errors and headaches.

As a group we decided to change the Google Java Style Guide's recommendation on indentation. We have increased the amount of spaces of indentation from 2, as recommended in the guide, to 4. We believe this will lead to enhanced code readability in cases the line doesn't word wrap.

We also discussed personal modification of column width and constant variable names. Ultimately, we've decided to comply to the recommended Google's style conventions. As a quick note, we considered bumping up the column width to 120 characters, but instead stayed with Google's recommended 100 column width. We also considered appended constants to denote constants, such as,

someNum CONST

but instead deferred to the Google Guide's recommended CONST_CASE, **SOME NUM.**

We've looked into, and compared with our chosen Style Guide, <u>Geosoft Java Programming Style Guidelines</u> [3] We like the explanations and clear reasoning behind the Geosoft style guide, but felt that some of the code was less human friendly and more prone to error.

For example, Google uses braces even when a body is empty or contains a single statement.

```
while(play) {
    doSomething();
}
Geosoft chooses not to use braces with a single statement.
while(play)
```

We feel that Geosoft, while aesthetically pleasing, offers less expandability in this statement and could lead to a bug if programmer is tired or careless when forgetting braces (or lack thereof)!

CIT_1 - https://google.github.io/styleguide/javaguide.html

CIT_2 - https://goo.gl/l8Dv7L

doSomething();

CIT_3 - http://geosoft.no/development/javastyle.html