

Assignment 01

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1 Github Link

<https://github.com/Emilfranord/BDSA-assignment-01>

2 Exercise 1

Nouns and verbs The following lists are of nouns and verbs, that appear in the specification.

Nouns:

1. version control system
2. changes
3. files
4. set of files
5. time
6. specific versions
7. system
8. source code
9. configuration data
10. diagrams
11. binaries
12. state
13. project
14. changes
15. problem
16. issue

Verbs:

1. want
2. records
3. can recall
4. work
5. revert
6. compare
7. see
8. modify
9. introduce

Domain The majority of the words belong to the technical domain. Several of the nouns only exist in the IT technical domain, such as 'source code', and 'binaries'. Other words come from the technical world in a less direct way.

Some of the verbs that are used, relate to the concept of time. Especially 'revert' and 'recall' belong to the time domain.

All together the words belong to the domain of version control systems.

libgit2sharp While libgit2sharp does not have classes representing 'File' or 'State', it still functions as a version control system. This is possible since the architecture of the program does not demand it. Instead of files, this implementation tracks 'GitObject' instances, be they files or something else. That way libgit2sharp, can still track the changes to files, and other data that needs to be tracked. This design was probably used to abstract the implementation away from specific files and data structures.

In this design there is not a 'state', because it is an emergent property of the system. That is, the state of the system at any given time is defined by the state of the objects, not a single object. This was there is no need for a class to handle the state of files, commits or similar, since that is handled inside the object instances themselves.