

System Programming – Project 3

Using FUSE, implement a file system that will process a directory containing the sources of a website (HTML files, CSS files, images and probably also other files) and make them accessible through a different path in the filesystem where the HTML files are “tidy”, i.e. their problems like missing or mismatched tags are fixed. The other types of files will be served as they are. The file system will have the same directory structure (all files and subdirectories) but it will not keep any files on its own; it will only provide an interface for the underlying directory. Any changes to the underlying directory should be immediately reflected in the tidied directory but the tidied directory will be read-only.

For tidying an HTML document, you can use the library given below, which is available on major Linux distributions through the package manager:

<http://www.html-tidy.org/documentation/>

In addition to the basic options, by default convert the document to XHTML and indent using 4 spaces during tidying (these are options of the libtidy package). For full marks, read the libtidy configuration from a file as described in the documentation.

Each member of the group must make a submission, even though the submitted files may be the same for all group members.

Group members will be graded individually based on their performance in the lab session and the submitted group project. Students who are not present during the lab session will not receive a grade for the project, even though they may have made a submission through the Ninova system.

Any form of cheating or plagiarism will not be tolerated. This includes actions such as, but not limited to, submitting the work of others as one's own (even if in part and even with modifications) and copy/pasting from other resources (even when attributed). The submitted work should be the product of the group itself; collaboration or code sharing between different groups will also be regarded as plagiarism. Serious offences will be reported to the administration for disciplinary measures.

Your code should not contain any leftover code you might have copy-pasted from other resources. For example, references like “rofs” and “hello” should not be part of your submitted homework.