**Regex project**

Background :

A regex matching algorithm is an algo A that takes a pattern R and a text T and finds all sub-strings of T that match the pattern R. One example of this is unix's grep.

for a given (continous) sub-string S of T we define the span of S as the indexes i,j such that S=T[i]...T[j].

Project outline:

The project is to take 2 state of the art regex matching algorithms and modify them so that their out put on R and T are a list of the spans found by the Algorithm and the time it took the Alg to find the spans.

Guidelines:

1. Choose 2 algorithms from:
   1. Agrep
   2. Gnu Grep
   3. NR – grep
   4. RE2 (google system also has a regex within it)
2. Append code or link to code for each algorithm you chose.
3. Modify / rewrite code to achieve required output, include documentation and explanations.
4. Create executable and makefile.

Project scope:

**Up to 40 hours**