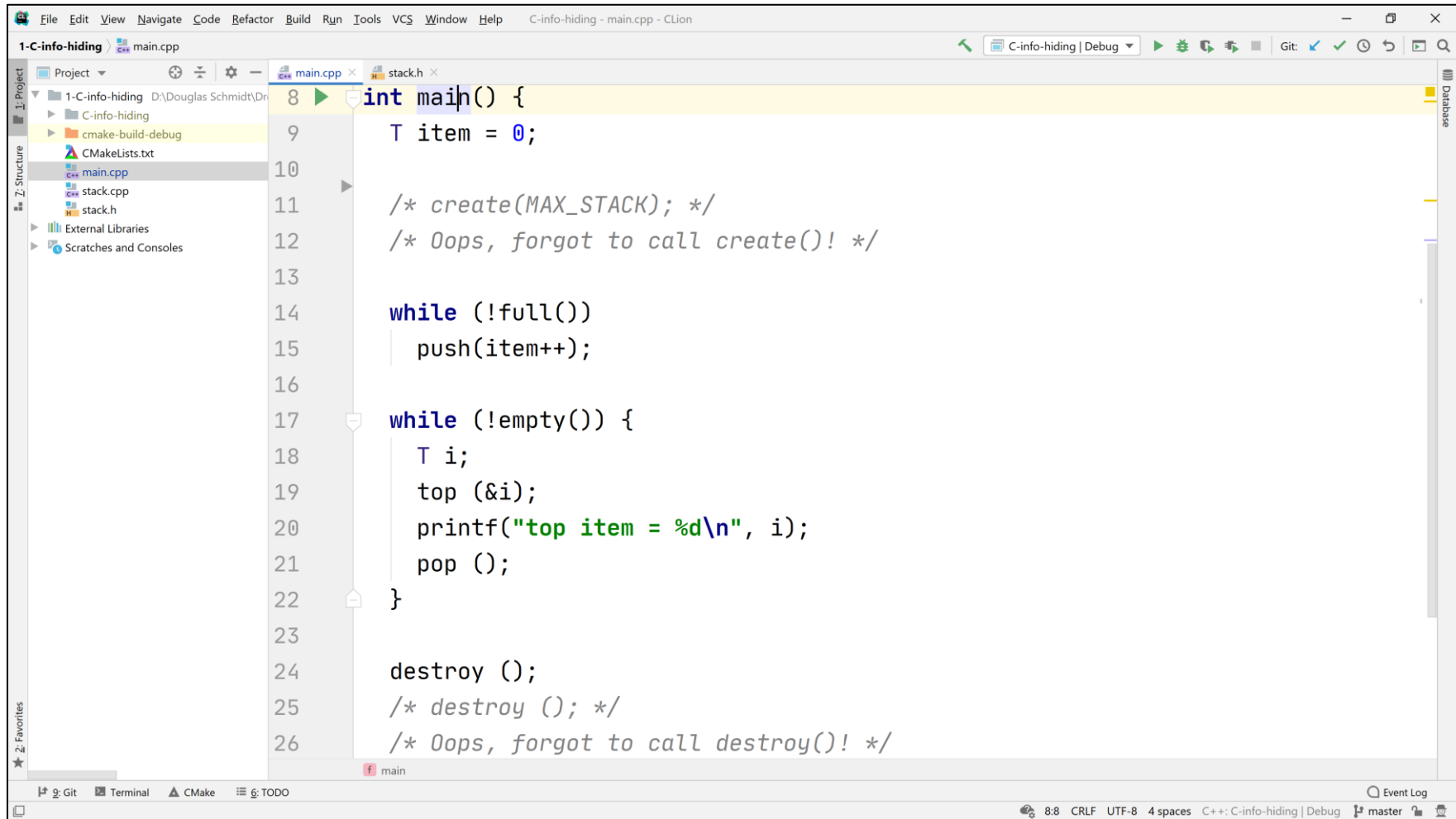


Information Hiding Implementation in C

- Define the interface & implementation to a stack of integers in C



```
1- C-info-hiding - main.cpp - CLion
File Edit View Navigate Code Refactor Build Run Tools VCS Window Help C-info-hiding | Debug
1-C-info-hiding
  C-info-hiding
  cmake-build-debug
  CMakeLists.txt
  main.cpp
  stack.cpp
  stack.h
  External Libraries
  Scratches and Consoles
8 int main() {
9     T item = 0;
10
11     /* create(MAX_STACK); */
12     /* Oops, forgot to call create()! */
13
14     while (!full())
15         push(item++);
16
17     while (!empty()) {
18         T i;
19         top (&i);
20         printf("top item = %d\n", i);
21         pop ();
22     }
23
24     destroy ();
25     /* destroy (); */
26     /* Oops, forgot to call destroy()! */
main
```

See [CPlusPlus/tree/master/overview/capabilities/1-C-info-hiding](https://github.com/DouglasC-Schmidt/CPlusPlus/tree/master/overview/capabilities/1-C-info-hiding)

Pros of Information Hiding Implementation in C

- Better than the "bare-bones" C implementation ;-)



Cons of Information Hiding Implementation in C

- The programmer must call `create()` first & `destroy()` last!
- There is only one stack & only one type of stack
- Name space pollution...
- Non-reentrant

