Usability features

The usability features of my program are an important consideration. These are the considerations made when designing the User Interface to make sure the program is easy to follow for users, and made as accessible as possible. In this section, I have made an approximate mockup of the design of each program, and annotated each of the design decisions involved.

# Compiler

The compiler’s simplest interface in terms of implementation and my testing will just be a command line interface. However, the educational component is to show graphically the stages of compilation and current actions. The program will contain only one screen, and will attempt to be consistent with the standard design ideas of windows (i.e. toolbars at the top). The program will look like this:

The parts labelled are:

Tables/memory

Working area

Assembly

Code display area

Help

Edit

File

* **File** – Contains options top open a C file, save an assembly file, or open settings
* **Edit** –
* **Help** – Contains options to open up the “About” window (showing basic information), and the full documentation
* **Code display area** – Contains the original C code
* **Working area** – Used to illustrate and explain the current thing that is happening. For example, a line of code being broken up into its tokens.
* **Tables/memory** – Records information the compiler has stored, such as the table of variable names.
* **Assembly** – The assembly code as it currently stands