

Homework 13

IDEs

Due: Saturday, April 8, 10:00PM (Hard Deadline)

Submission Instructions

Submit screenshots with 1-3 descriptive paragraphs of what is shown, and how it was a learning experience for you. Alternately, visit a TA during office hours and have a show and tell about what you did and learned.

1 Which IDE? Which Platform?

The proprietary nature of the two most common IDEs (Xcode and Visual Studio), and their mutually exclusive availability will make this assignment be a “Choose Your Own Adventure.” Combine that with the fact that neither is available on open source operating systems, and the work you will do for this assignment quite subjective. The goal however is straightforward, sample a new IDE, or extend your abilities with your current IDE.

The Assignment

In lecture, we discussed the many tools and services that modern IDEs provide. This list included far more than the “Big Five,” which are text editor, compiler, debugger, file manager, and build system. Your task is to show how you can use more of your IDE. To do this, you will need to demonstrate the use of 2 or more of the other tools or functionalities that your IDE provides.

1.1 I’m a Mac

Some examples of new uses:

1. Use “Source Control” to put your project and source code into a local and an online repository (gitlab.eecs.umich.edu).
2. Start a new type of project that is more than just command line program (preference pane, game, automator action, an iOS/watchOS/tvOS application or game). This product can be simple, make sure that it launches and runs, and displays your name, unixname, and “C4CS”.
3. Add more target(s) to an existing Xcode project, that can be used to very thoroughly test aspects of the main target.
4. Toy with something in Objective-C or Swift.

1.2 I’m a PC

Some examples of new uses:

1. Install “Git Client Tools” and use VS to put your project and source code into a local and an online repository (gitlab.eecs.umich.edu).

2. Start a new type of project that is more than just command line program (web, Silverlight or Office tool, a Windows application or game). This product can be simple, make sure that it launches and runs, and displays your name, username, and “C4CS”.
3. Add more projects(s) to an existing Visual Studio Solution, that can be used to very thoroughly test aspects of the main target.
4. Try something in a new language.

1.3 I am a Full Time Linux User

Some examples of new uses:

1. Install an IDE (NetBeans, Eclipse, etc). You’ll need to “BYOC,” bring your own compiler.
2. Use your local IDE to put your project and source code into a local and an online repository (gitlab.eecs.umich.edu).
3. Start a new type of project that is more than just command line program (desktop app, control panel or utility, etc). This product can be simple, make sure that it launches and runs, and displays your name, username, and “C4CS”.
4. Add more projects(s) to an existing IDE Solution, that can be used to very thoroughly test aspects of the main target.
5. Try something in a new language.

1.4 That Still Doesn’t Cover My Situation

Get creative! Try something, learn something, and make sure that you can demonstrate this to a TA:

1. Install an IDE into your virtual machine’s OS.
2. Install some other IDE into your host OS.
3. Keep trying...

Be Honest

This is going to be a very difficult assignment to grade since everyone has different hardware, experiences, and workflows. It would be very easy to say that you’ve never used an IDE, so just installing one is new to you. Push yourself to learn a new and useful skill, that will help you moving forward as a Computer Scientist.