



Machine and Environment Setup

.NET

**“Failure is central to engineering.
Every single calculation that an
engineer makes is a failure
calculation. Successful engineering
is all about understanding
how things break or fail**

”
– Henry Petroski

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[Version Control](#) – GitHub. This is where we will store our documents and code, record changes, and control which version of our code we use.

Chat Platform - Slack

1. Download Slack to PC and phone
2. Each associate is responsible for maintaining contact and being up to date on messages on Slack. Especially during 9-5 (CST) hours.
3. Get everyone into the Class workspace. Messages disappear after a few days so copy/download what you want to keep.

Code Editor – Visual Studio

<https://docs.microsoft.com/en-us/dotnet/core/tutorials/cli-create-console-app>

1. download Visual Studio
2. <https://visualstudio.microsoft.com/>
3. Install [SDK](#) together.

SDK (Software Development Kit)

https://en.wikipedia.org/wiki/Software_development_kit#:~:text=

A software development kit (**SDK**) is a collection of software development tools in one installable package. They ease creation of applications by having compiler, debugger and perhaps a software framework. They are normally specific to a hardware platform and operating system combination.

Some SDKs are required for developing a platform-specific app. For example, the development of an Android app on Java platform requires a Java Development Kit. For iOS applications (apps) the iOS SDK is required. For Universal Windows Platform (UWP) the .NET Framework SDK might be used. There are also SDKs that add additional features and can be installed in apps to provide analytics, data about application activity, and monetization options. Some prominent creators of these types of SDKs include Google and Facebook.

gitBash

1. Git for Windows focuses on offering a lightweight, native set of tools that bring the full feature set of the [Git SCM](#) to Windows while providing appropriate user interfaces for experienced Git users and novices alike.
2. go to <https://gitforwindows.org/>

Version Control – GITHUB.COM

<https://gitforwindows.org/>

1. Open Command Line (Terminal). Run `'git -version'`. Download *GitBash* if you don't have git ([Windows](#) or [Mac](#)).
2. Create a personal Repo of the format `'kenEndo-repo0'`.
3. Clone your remote repo from your local gitBash.
4. Create a text doc in your cloned repo folder.
5. Push a simple text doc.
 - `git add .`
 - `git commit -m "message to self"`
 - `git push`
 - Create new upstream branch, if necessary.
 - Verify it worked by looking online.

Basic Git Life Cycle

<https://education.github.com/git-cheat-sheet-education.pdf>

1. `git clone [url]` or `git pull` from master branch.
2. `git checkout -b [branchName]` (Create a new “feature” branch and switch to it.)
3. Make changes to add a feature.
4. `git add .` (Add all changes made to tracking)
5. `git commit -m “This message tells what the changes are”` (Add to staging)
6. `git pull` (to be 100% sure no changes were made while you were working)
7. `git push`
8. Go online and make a pull request (PR) to master.