
Build with Tarbell Tutorial

Release

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1.1 Lesson 1: Goals and Prerequisites

1.1.1 Goals

- Hands-on experience building a website.
- Create a website that helps promote your work or tells a story you're working on.
- **Fundamental tools:**
 - Markup (HTML)
 - Styling (CSS)
 - Versioning (Git)
 - Responsive design (Bootstrap)
 - Data management, templating, and publishing (Tarbell)

1.1.2 Background

Here are some resources to get you started with the basic skills you'll need to build a website:

- [Codecademy Web Fundamentals](#)
- [Try Github](#)
- [Mozilla Thimble](#)

If you are already

1.1.3 Prerequisites

1. A laptop with OS X 10.7+ or Linux
2. A [command-line interface](#) to interact with your computer
3. A [text editor](#) to work with plain text files
4. Version 2.7 of the [Python](#) programming language
5. The [pip](#) package manager

6. [Git](#) version control software
7. An account at [GitHub.com](#)
8. A [Google](#) account and `client_secrets.json` file.
9. [Tarbell](#) publishing software

Note: Depending on your experience and operating system, you might already be ready to go with everything above. If so, move on to the next chapter. If not, don't worry. And don't give up! It will be a bit of a slog but the instructions below will point you in the right direction.

Bring your own laptop

This will be no fun for anybody if you don't have an OS X or Linux-based laptop to bring to the workshops.

Command-line interface

A command line interface, also known as a terminal, is a program that lets you type in commands that control your computer.

- Apple OS X: Open the “[Terminal](#)” application.
- Ubuntu Linux: Open the “[Terminal](#)” application.

Note: Very little command line skills will be required for this tutorial. You'll need to run some commands to install the necessary software, and will use the command line to publish your project.

Text editor

You'll be editing simple “[plain text](#)” files.

Just like you need a word processor for writing human language, you need a text editor for working with plain text such as HTML markup, CSS, and Javascript.

We recommend *Sublime Text* <<http://www.sublimetext.com/3>> for all participants. It's fast, simple, and sensible.

Python

To make sure your system has Python 2.7 installed, type the follow into your command line:

```
python -V
```

You should see a reply like:

```
Python 2.7.5
```

pip package manager

The [pip package manager](#) is needed to install Tarbell, our publishing tool.

You'll probably need to install pip on your system.

On Mac OS X, run this command on your command line:

```
sudo easy_install pip
```

To verify that you have pip installed, run:

```
pip -V
```

Git and Github

Git is a version control program for logging the changes you make to files over time. This is useful when you're working on your own, but quickly becomes essential when working with others.

You will use Git

GitHub is a website that hosts git code repositories, both public and private. It comes with many helpful tools for reviewing code and managing projects. It also has some [extra tricks](#) that make it easy to publish web pages, which we will use later.

GitHub offers helpful guides for installing Git in [Mac OS X](#) and [Linux](#). You can verify it's installed from your command line like so:

```
# You don't have to type the "$" It's just a generic symbol
# geeks use to show they're working on the command line.
$ git --version
```

Once that's done, you should create an account at GitHub, if you don't already have one. It shouldn't cost you anything. [The free plan](#) is all that's required to complete this lesson.

Google account and client secrets file

You'll need a Google account to manage the data and content on your site with Google spreadsheets. If you have a gmail address, you already have a Google account.

You'll need to follow [this guide to downloading a client_secrets.json file](#) to your computer. This file acts like a password that allows Tarbell to communicate with Google spreadsheets.

Install Tarbell

Time to install Tarbell!

```
sudo pip install tarbell==0.9b4
```

Time to configure Tarbell:

```
tarbell configure
```

Follow the default prompts. You'll need to provide the location of your client secrets file and visit a website to validate your access. It's a pain, but you only have to do it once.

For now, you should specify "no" / "n" when prompted to configure Amazon S3.

About this tutorial

This tutorial will walk you through the process of building a simple portfolio website using Google spreadsheets to manage your content and data and Tarbell to publish your work.

It is meant to familiarize you with basic web concepts and technologies and to produce a useful personal project.

You will get hands-on experience in every stage of the development process, writing HTML, CSS, and template logic, recording your work using Git's version control system. By the end your work will be published online.

This guide was prepared for training sessions at the Chicago Tribune by David Eads. It was debuted on March 27, 2014.

Note: If you have some experience with these technologies or a work-related project to work on, use this tutorial as a template for your project.

Resources

- Code repository: <https://github.com/eads/build-with-tarbell/>
- Demonstration: To come.
- Documentation: <http://build-with-tarbell.readthedocs.orgs/>
- Issues: <https://github.com/eads/build-with-tarbell/issues/>
- Technical presentation: <http://tarbell.tribapps.com/build-with-tarbell/>