# SHR Specification Authoring

First, you will need to pull down the current SHR specification to build on. You need a tool called git to do that.

## Setting Up Authoring Environment

### 1. Install Git

Download git from <https://git-scm.com/downloads> and install it. On Windows, you run the file you download by double clicking on it in the File Explorer.

### 2. Install Node.JS

Download Node.js from <https://nodejs.org/en/download/> and install it.

### 3. Open Git Bash

From the Start menu in Windows, run Git Bash which will open a command prompt that emulates a UNIX bash shell.

### 4. Clone SHR Spec

1. Change directory (cd) to a suitable base directory (e.g., c:/shr). This directory will be referred to as <base> in all subsequent paths. Create it first of course if necessary via mkdir or using Windows File Explorer. Perform each of the remaining steps from the <base> directory.
2. Execute the command: git clone <https://github.com/standardhealth/shr_spec.git>

This will create a directory named shr\_spec in the <base> directory which contains the current SHR specification

### 5. Clone and Setup SHR Import/Export Tool

1. cd to <base>
2. Execute the command: git clone <https://github.com/standardhealth/shr-cli.git>

This will create a directory named shr-cli in the <base> directory which contains the command line interface to the SHR specification import/export tooling.

1. cd to <base>/shr-cli
2. Execute the command: npm install

### 6. Clone and Setup SHR Web Site Generation Tool

1. cd to <base>
2. Execute the command: git clone <https://github.com/standardhealth/spec_json2html.git>

This will create a directory named spec\_json2html in the <base> directory which contains a tool to generate a web site version of the SHR specification.

1. cd to <base>/spec\_json2html
2. Execute the command: npm install -g grunt-cli
3. Execute the command: npm install -g http-server
4. Execute the command: npm install

## How to Use the Tools during Authoring – Start of new session

1. cd <base>/shr-cli
2. node cli.js <base>/shr\_spec/spec ./out
3. cp <base>/shr-cli/out/json/shr.json <base>spec\_json2html/assets/data/data.json
4. cd <base>/spec\_json2html
5. grunt static
6. http-server dist
7. Open browser and browse to any of the following URLs as a starting point to see the content you are authoring:

|  |  |
| --- | --- |
| **URL** | **What you will see** |
| <http://localhost:8080/> | Displays an index of each entry in each namespace |
| <http://localhost:8080/index_all_elements.html> | Displays an index of each data element (whether an entry or not) in each namespace |
| <http://localhost:8080/vs/> | Displays an index of value sets in each namespace |
| <http://localhost:8080/cs/> | Displays an index of code systems in each namespace |

## How to Use the Tools as updates are being made throughout session

Web server can be left running in a git bash window. Open another one.

1. cd <base>/shr-cli
2. node cli.js <base>/shr\_spec/spec ./out
3. cp <base>/shr-cli/out/json/shr.json <base>spec\_json2html/assets/data/data.json
4. cd <base>/spec\_json2html
5. grunt static
6. Now browser can be force refreshed to see updated content (must force refresh due to caching)