

Open-Source Report

Proof of knowing your stuff in CSE312

Guidelines

Provided below is a template you must use to write your reports for your project.

Here are some things to note when working on your report, specifically about the **General Information & Licensing** section for each technology.

- **Code Repository:** Please link the code and not the documentation. If you'd like to refer to the documentation in the **Magic** section, you're more than welcome to, but we need to see the code you're referring to as well.
- **License Type:** Three letter acronym is fine.
- **License Description:** No need for the entire license here, just what separates it from the rest.
- **License Restrictions:** What can you *not* do as a result of using this technology in your project? Some licenses prevent you from using the project for commercial use, for example.

Also, feel free to extend the cell of any section if you feel you need more room.

If there's anything we can clarify, please don't hesitate to reach out! You can reach us using the methods outlined on the course website or see us during our office hours.

Socket.io

General Information & Licensing

Code Repository	https://github.com/socketio/socket.io
License Type	MIT
License Description	<p>The MIT License is a permissive open source license. It allows you to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the software. It also allows you to permit persons to whom the software is furnished to do so, under the following conditions:</p> <ul style="list-style-type: none">• The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.• THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT,

	TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
License Restrictions	<ul style="list-style-type: none"> No restrictions

Magic ★★°°☺°°👉°°★🌀🌈🌟

*This section will likely grow beyond the page

We create a new socket object here:

<https://github.com/sebastianrich18/CSE-312/blob/master/src/app.ts#LL144C40-L144C40>

After creating this object socket.io calls handle request:

<https://github.com/socketio/engine.io/blob/95e215387c589025dde3982865bf8c862d049469/lib/server.ts#L631>

Inside this function handleUpgrade is called

This upgrades the TCP connection to a websocket connection

Now we are receiving and sending over a websocket.

<https://github.com/socketio/engine.io/blob/95e215387c589025dde3982865bf8c862d049469/lib/server.ts#L676>

Called when server receives a frame

onPacket

<https://github.com/socketio/engine.io/blob/95e215387c589025dde3982865bf8c862d049469/lib/socket.ts#L132>

Called when server identifies a frame as a message

onData

<https://github.com/socketio/engine.io/blob/95e215387c589025dde3982865bf8c862d049469/lib/transport/polling-jsonp.ts#L29>

Decode frame into string so we can read the data

Decode frame

<https://github.com/socketio/engine.io/blob/95e215387c589025dde3982865bf8c862d049469/lib/parser-v3/index.ts#L127>

Encode frame is used when emitting messages back to the client. This function encodes a frame into bytes to be sent back to the client.

Encode frame

<https://github.com/socketio/engine.io/blob/95e215387c589025dde3982865bf8c862d049469/lib/parser-v3/index.ts#L63>

