

Coding Conventions

Mat3D (Matrix Masters)

Universal:

- Try to keep all lines within 80 characters. However, if a line's visibility subjectively suffers from this guideline, over 80 characters is allowed.
- Indentation is not optional. Use indentation to ensure flow within your code.
- Variable names should be in camel case. Ex. "Hello There" -> "helloThere".
- Try to keep your code legible. Remove extraneous/old code and abstract portions of your where appropriate.
- Use the K&R bracket style.

JavaScript:

- Every file must include a top JSDoc style comment describing the file. This comment should include the tags in this order:
 - @author with author1, author2, ..., authorN
 - @version with the version number

This comment can be replaced by the object constructor comment if the file is ONLY used to specify an object.

- All functions/methods must have JSDoc style comments. These comments should include the tags in this order:
 - @author if the file includes code written by different people on the team (otherwise just include it once at the top comment within the file)
 - @private if the function/method is private
 - @param for each argument provided to a method/function
 - @returns (NOT @return) if the function/method returns something
 - @throws if the function/method throws anything
- Object constructors must have JSDoc style comments. These comments should include the tags in this order:
 - @constructor (Nothing else)
 - @author with author1, author2, ..., authorN
 - @version with the version number
 - @this with {OBJECT TYPE}
- Brackets on single line loops/conditionals are not optional.

HTML:

- For files that were created by a team member (or a file that came from somewhere else but was mostly modified), put a block comment at the top of the file containing:
 - <!--
 - Name: (if there are multiple names, add them in one line: author1, author2, ..., authorN)
 - UCSC email: (if there are multiple emails, add them in one line: email1, email2, ..., emailN)

- File name:
- -->
- All HTML element names must be composed of lowercase letter
- All HTML elements must be closed
- All divs must be indented properly and in the order that they were created in
- Try not to have lines run too long (especially for divs or HTML elements that have several attributes). If they do, then follow this format:
 - <opening tag (specify all attributes here)>
 - (tab) (text or other tags go here)
 - </closing tag>
- Use names for classes and ids that make it clear what part of the webpage they are for, as well as for any vue commands.

CSS:

- For files that were created by a team member (or a file that came from somewhere else but was mostly modified), put a block comment at the top of the file containing:
 - `/**`
 - Name: (if there are multiple names, add them in one line: author1, author2, ..., authorN)
 - UCSC email: (if there are multiple emails, add them in one line: email1, email2, ..., emailN)
 - File name:
 - `*/`
 - All CSS must be placed within mat3d.css. No CSS can be in ANY HTML file unless it can only run when it is together in an HTML file.
 - In a CSS file (such as mat3d.css), separate the CSS by mentioning the files they are used in so it is easier to look at and is more organized.
 - If you copied any CSS from another website, put all the links in a block comment at the top of the CSS file (below the block comment with the name, email etc.).
 - Start each CSS function with a “.” for classes or a “#” for ids.
 - Use one line for each CSS declaration and keep them all in between the curly braces.
- For example:

```
○ .matrices {
    ■ padding: 10px;
    ■ border: black 5px;
    ■ border-style: solid;
○ }
```

Python:

- For files that were created by a team member (or a file that came from somewhere else but was mostly modified), put a block comment at the top of the file containing:
 - `"""`

- Name: (if there are multiple names, add them in one line: author1, author2, ..., authorN)
 - UCSC email: (if there are multiple emails, add them in one line: email1, email2, ..., emailN)
 - File name:
 - """"
- Follow the JavaScript/Universal guidelines where applicable.
- Use all lowercase letters for method names.
- Put two line breaks between each method.