App: Colours: Phase #1

Date: Feb 27th, 2023
Domain: https://colours.brickmmo.com
GitHub: https://github.com/codeadamca/brickmmo-colours
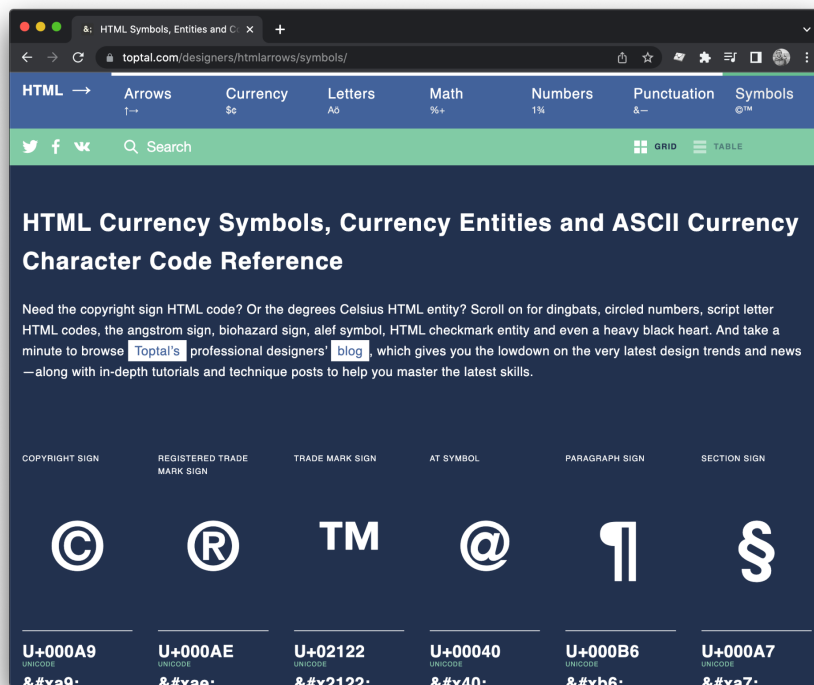
Application Purpose:

This application will provide a series of tools related to the official LEGO™ colour palette. This will include a small website for visitors to browse, search, and convert colours as well as an API for other BrickMMO applications to incorporate the LEGO ™ colour palette.

Front-End:

Front end facing application will include the following features:

- Browse LEGO™ colour palette
- Search for LEGO™ colours using colour keywords
- Convert existing colours from text, CMYK, or RGB to the LEGO™ colour palette

Application will include similar UI and features to this HTML Symbols tool:

https://www.toptal.com/designers/htmlarrows/symbols/

Back-End:

Application will include a control panel to achieve the following:

- Login to control panel
- Add, edit, and delete LEGO™ colours
- Import LEGO™ colour palette from ReBrickable API:
  https://rebrickable.com/api/

API:

Application API will include the following API calls:

Method	Endpoint	Description
GET	/api/colours	A list of colours. **Returns:** A list of all LEGO™ colours. Each colour will include ID, name, RGB, CMYK, transparency, BrickLink ID, and BrickLink name.
POST	/api/convert	Converts a specified colour to a LEGO™ colour palette colour. **Parameters:** colour (required): RGB, CMYK, or text colour **Returns:** A single colour including ID, name, RGB, CMYK, transparency, BrickLink ID, BrickLink name, a match distance.