Block Wall Designer

Overview

The **Block Wall Designer** is a simple web-based tool that allows users to design a wall layout with blocks of varying widths. The tool lets you specify the dimensions of the wall and the amount of variation in block width. It then generates a visual representation of the wall using SVG elements and provides statistics on the total number of blocks used.

Features

- **Wall Dimension Customization**: Set the width and height of the wall in centimeters.
- **Block Width Variation**: Adjust the percentage variation in block width to create a more randomized wall design.
- **Real-Time Visualization**: View the wall layout instantly as an SVG graphic.
- **Statistics**: See the total number of blocks used in the design.

How to Use

1. **Set Wall Dimensions**:
   - **Wall Width (cm)**: Enter the desired width of the wall in centimeters.
   - **Wall Height (cm)**: Enter the desired height of the wall in centimeters.
2. **Set Block Width Variation**:
   - **Block Width Variation (%)**: Enter the percentage variation in block width. The default is 10%, which allows blocks to vary by ±10% of the standard block width.
3. **Generate the Wall**:
   - Click the **Generate Wall** button to create the wall layout based on the specified parameters.
4. **View the Results**:
   - The wall will be displayed as an SVG graphic below the controls.
   - The total number of blocks used in the design will be shown under the wall.

Technical Details

- **HTML Structure**: The main layout is contained within a `.container` div element. The controls are housed in a `.controls` div with separate input groups for wall dimensions and block width variation.
- **Styling**: The page is styled using internal CSS, with a focus on simplicity and readability.
- **JavaScript Functionality**:
   - The `generateWall()` function handles the creation of the wall layout.
   - The function calculates block dimensions, applies variation, and appends them to the SVG element.
   - Block statistics are updated dynamically after each wall generation