

Technical Brief — Cuban Link Customizer Tool

Core Features:

Dynamic Chain Length:

- The total number of links can be adjusted by the user.
- Changing the number of links automatically updates the visual preview and chain length.

Per-Link Material Customization:

- Each link can have its own material.
- Available materials: Silver, Grey, Black, White, Gold.
- Materials should be selectable from a predefined library and applied to the 3D mesh dynamically.

Link Structure:

- Each link consists of four customizable surfaces:
 - 2 top surfaces
 - 2 side surfaces
- Each surface can have one of four customization types:
 - **Empty** – no applied element (base material only).
 - **Gemstones** – top surfaces contain 3 gemstones each, side surfaces contain 2 gemstones each. Each gemstone's color can be selected individually.
 - **Enamel** – one enamel layer per surface, with multiple color options.
 - **Engraving** – one engraving element per surface, chosen from two preset designs for the initial version.

Example Use Case:

A customer could design a 12-link chain where every second link uses black metal, the top surfaces feature red and blue gemstones, one side surface uses white enamel and another one green.