

# KINTSUGI 3D VIEWER: USER-CENTRIC DESIGN FOR CULTURAL HERITAGE ACCESSIBILITY

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## KINTSUGI 3D VIEWER

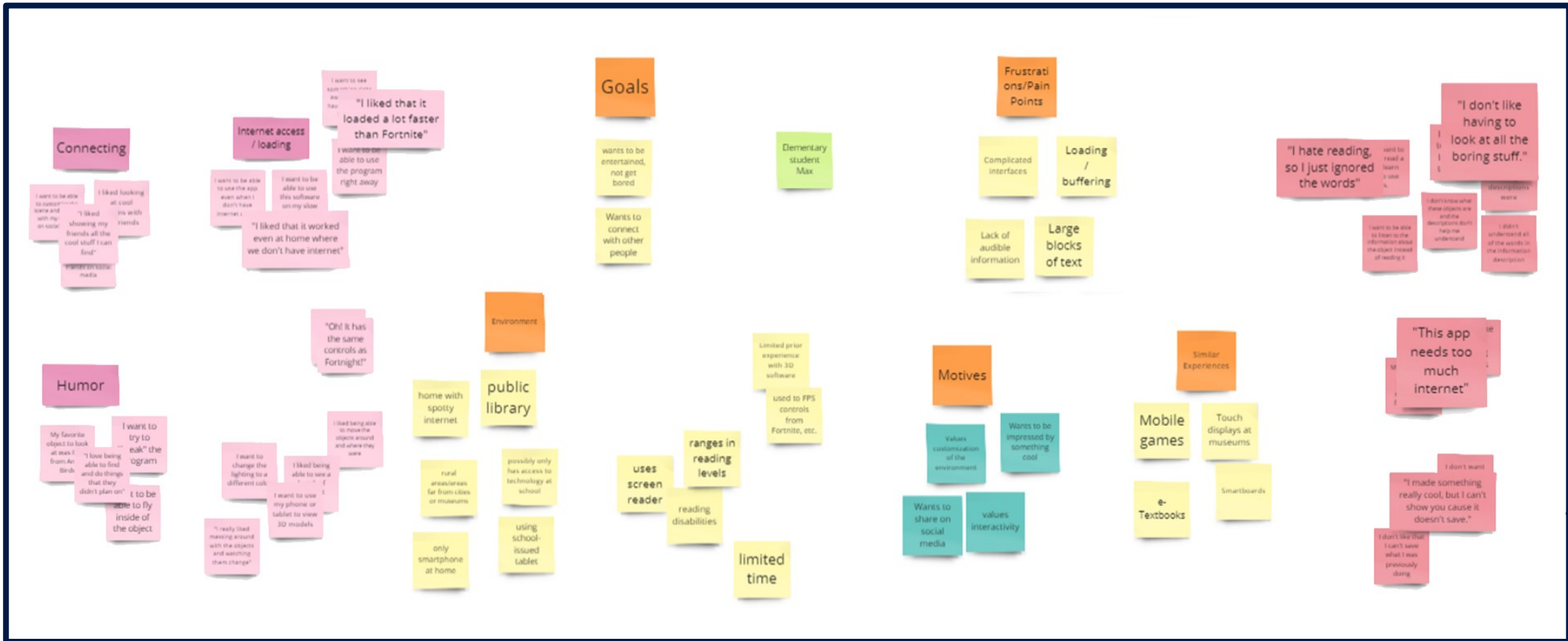
Kintsugi 3D Viewer is an application designed to provide more accurate digital representations of 3D cultural heritage objects, intended to be used by both professionals and everyday people.

**Challenge:** Create a design that accommodates the varying levels of digital proficiency and ability found in the target users.

## METHODS

**Proto Personas:** Fictional users representing the target audience.  
**Concept Testing, A/B Testing, and Surveys:** Designs were presented to participants to gauge appeal and clarity.  
**Common Practices and Symbols:** Research was collected from literature on familiar UI and UX practices.

## DESIGN DEVELOPMENT



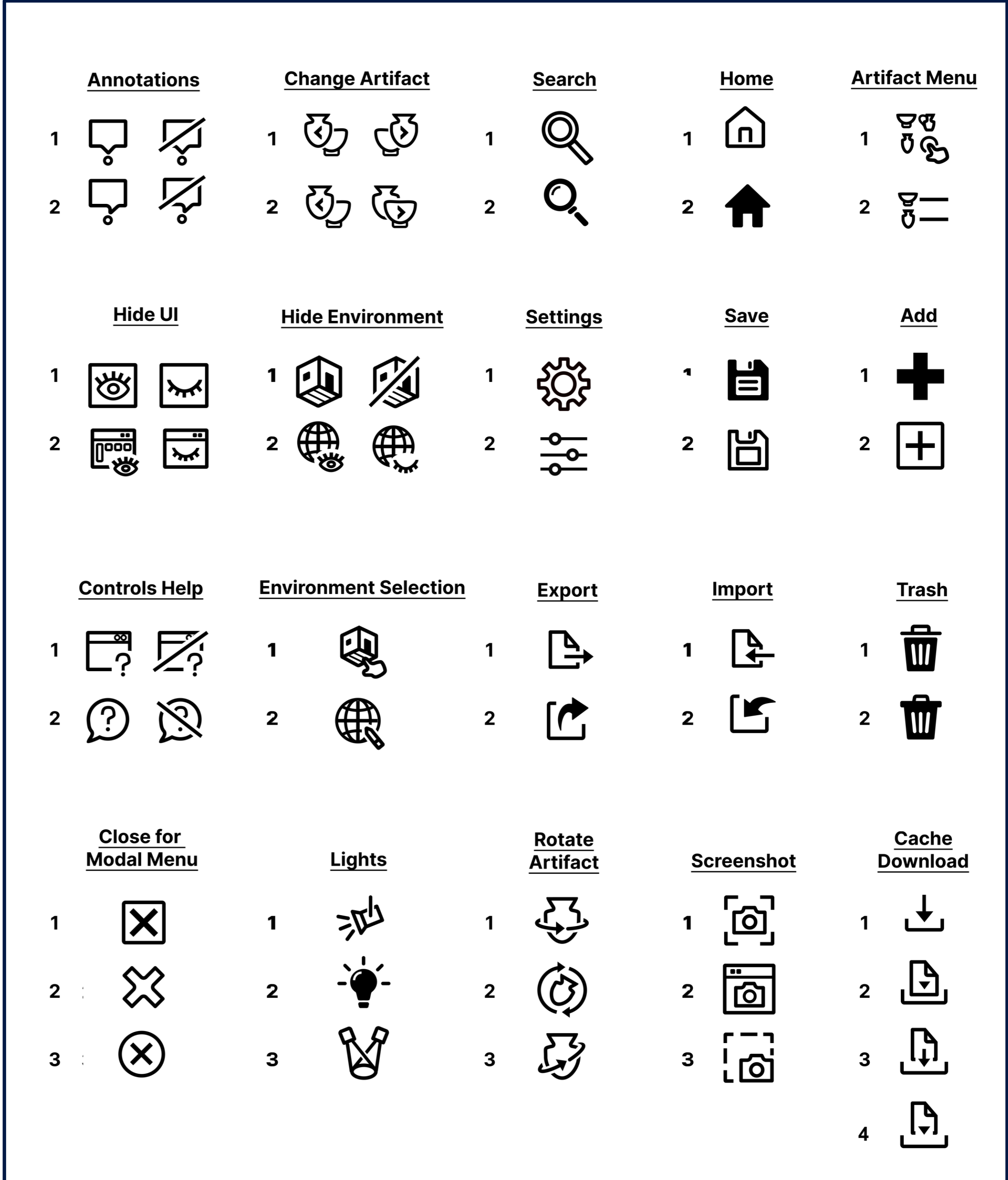
Example of proto persona development (Max)

MAX	SAM	TAYLOR
<ul style="list-style-type: none"><li>Elementary Student</li><li>Rural Environment</li><li>Limited Internet</li><li>Reading Disabilities</li><li>Desire to have fun and connect</li><li>Uses educational software</li><li>Plays mobile games</li></ul>	<ul style="list-style-type: none"><li>Archaeologist</li><li>Works at university and working site</li><li>Spotty Wi-Fi</li><li>Colorblind + Visually impaired</li><li>Desire to preserve and obtain funding</li><li>Limited exp. with technology</li><li>Comfortable with real life objects</li></ul>	<ul style="list-style-type: none"><li>Museum Art Photographer</li><li>Powerful work computer</li><li>Fast Internet</li><li>Desire to use latest and greatest technology</li><li>Want work to be highest quality</li><li>Experienced in 2D and 3D software</li></ul>

Proto Persona summaries



Logo development



Iconography options

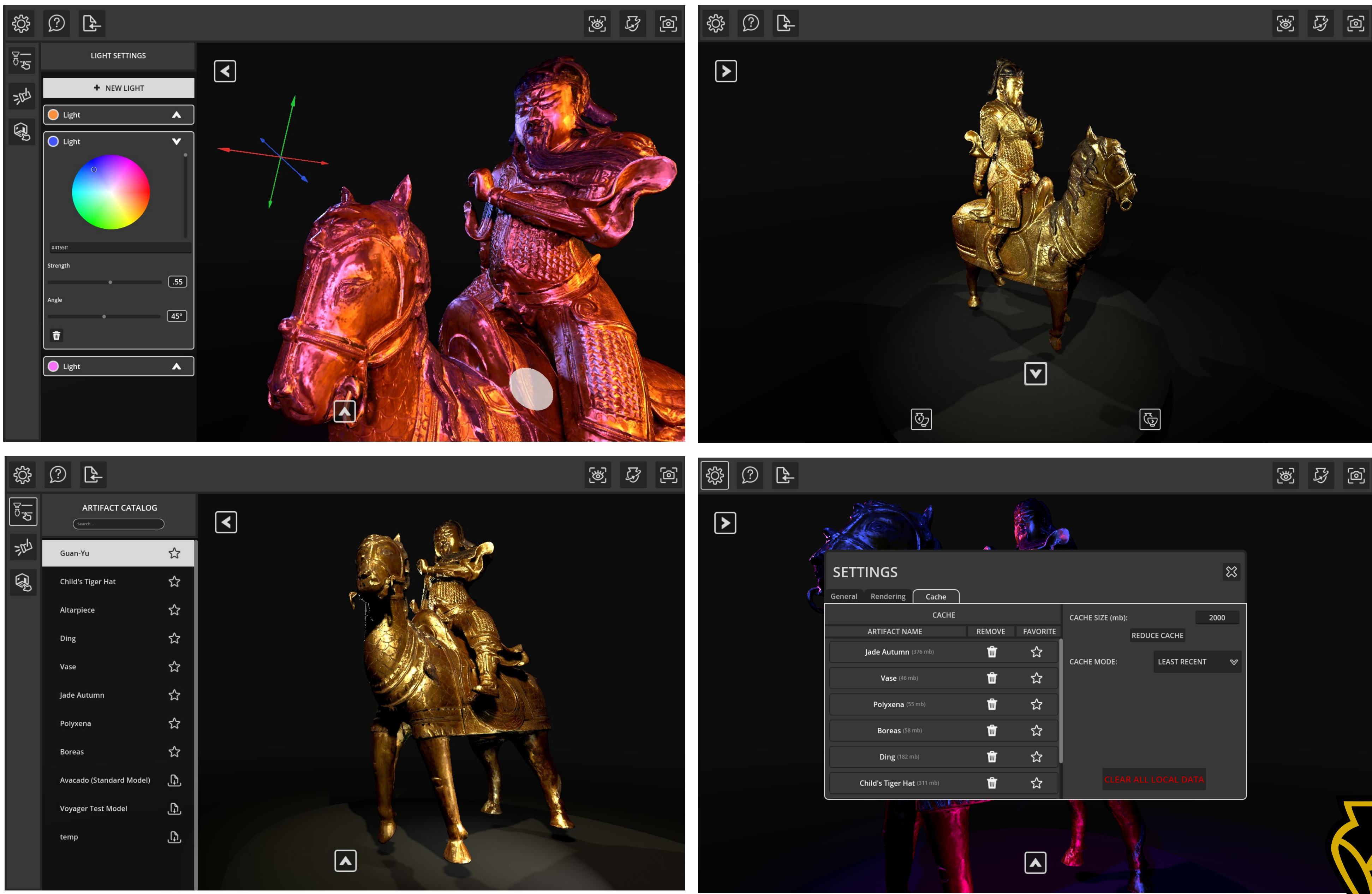
## VOYAGER STORY



Kintsugi 3D Viewer will support Smithsonian's Voyager Story as an authoring platform for virtual exhibits. Features from Voyager Story that will be supported include:

**Lights:** Color, intensity and position.  
**Object scale:** Match adjustments made in Voyager Story.  
**Annotations:** Position, title, and content for "pop-ups" with details about features on an artifact.  
**Use of glTF format:** Provides consistency between Voyager and Kintsugi 3D Viewer, and allows for import / export between programs.

## RESULTS



## WANT TO SEE MORE?



Check it out for yourself!

### Acknowledgements



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