

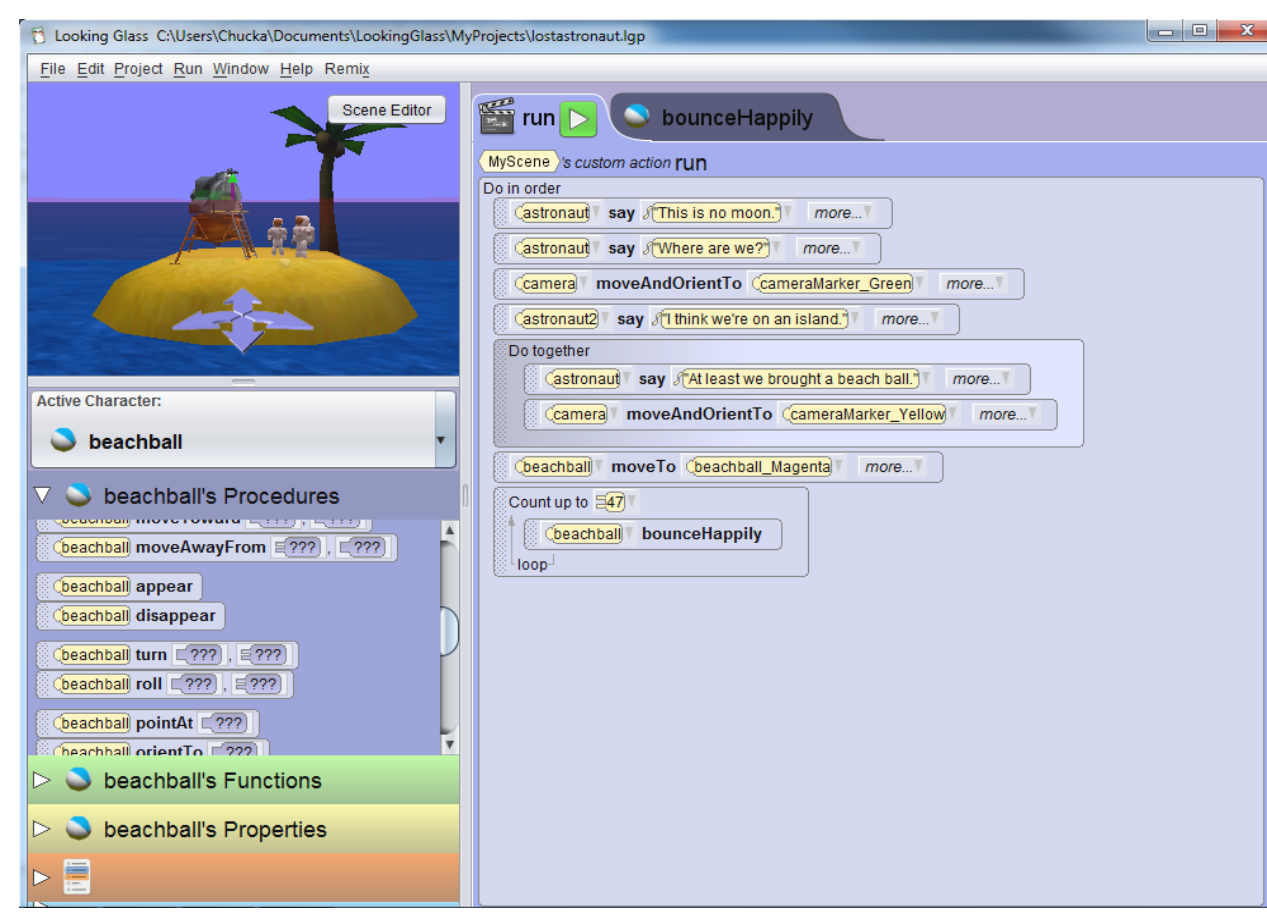
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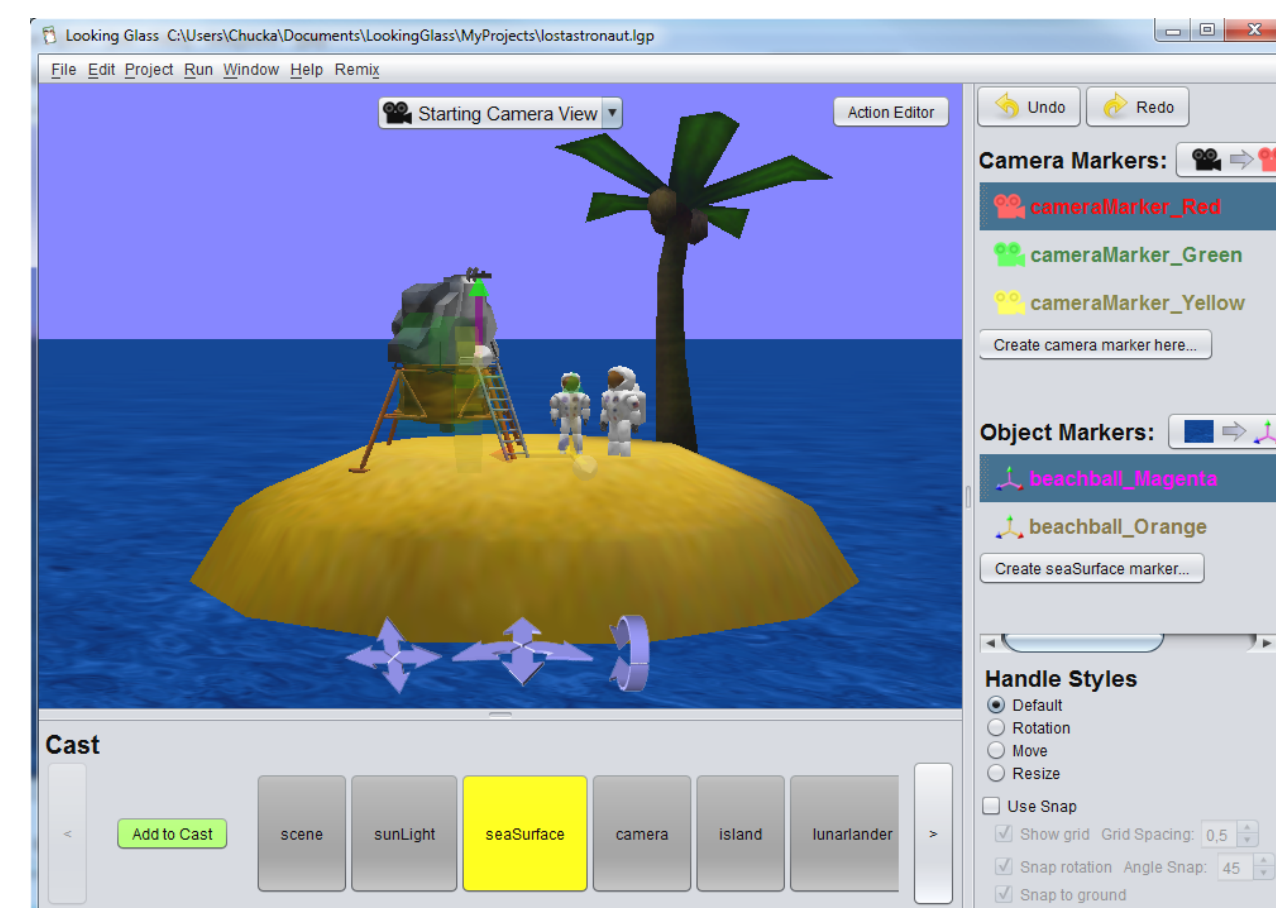
Introduction

Despite the ubiquitous presence of computers and technology, limited opportunities to learn computing skills result in only a small, homogenous segment of the population entering the field.

Looking Glass is a programming environment designed to provide the opportunity for young learners to independently teach themselves computer programming.



Screenshot of Looking Glass Action Editor



Screenshot of Looking Glass Scene Editor

We hope to promote long-term engagement with Looking Glass by learning from the example of online services such as NeoPets and Webkinz. Young users spend hundreds of hours on these websites in the pursuit of new, desirable, and rare items to add to their collections.

In Looking Glass, the corresponding collectables are 3D models of environments, characters, and props used to create an animated movie. We designed a system to employ users' natural acquisitiveness to motivate sustained interest in Looking Glass.

Methods

In Looking Glass, 3D models ("characters") are ...

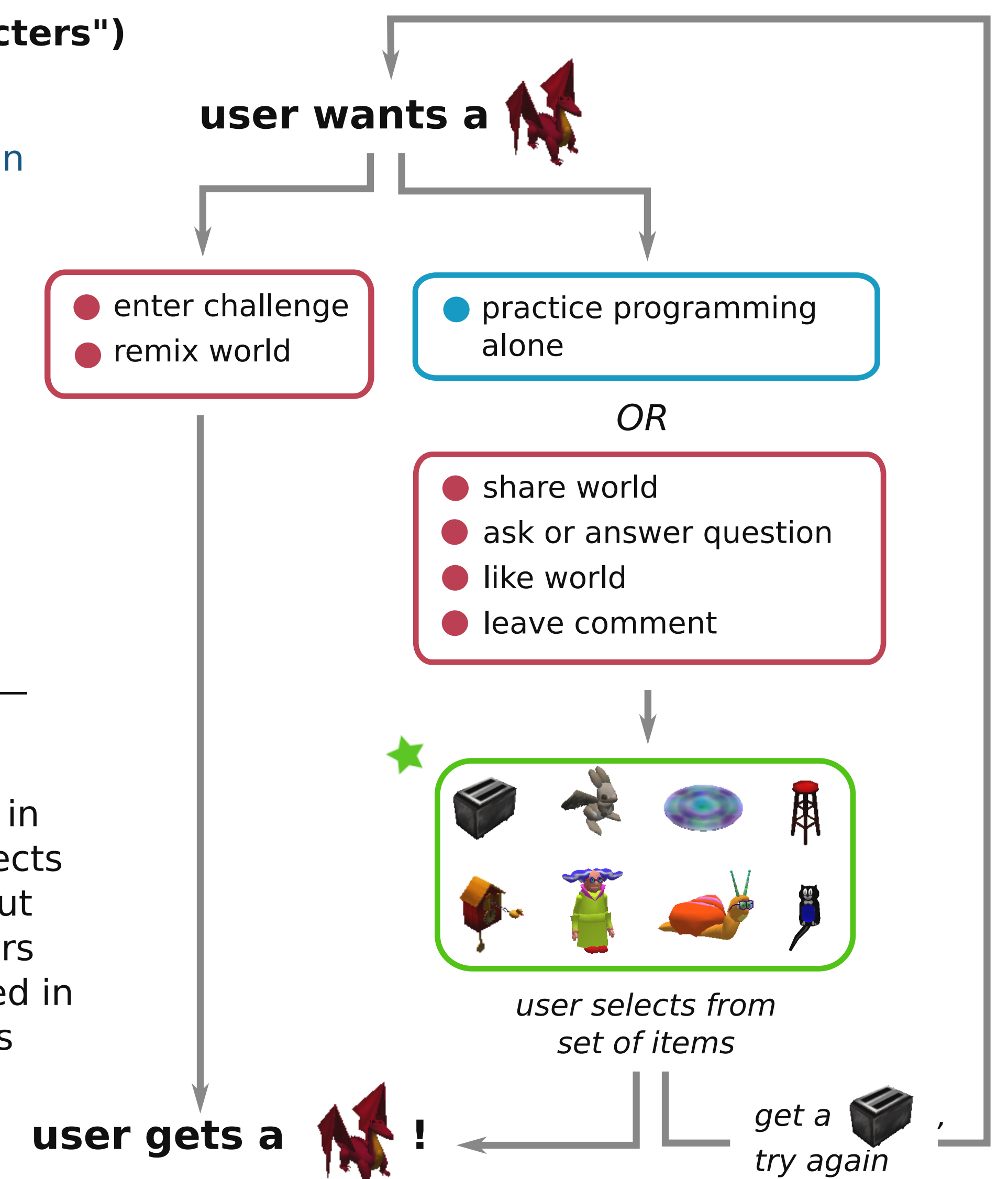
necessary to make a movie
a possible source of inspiration

Characters could be ...

status symbols
users will pursue rare characters for their prestige

collectables
users will work to acquire all the ___

personal
a users' choice in characters reflects something about him or her, users will feel invested in their characters



★ We can learn the value of a character from the community. The more users who own it, the less likely it will appear as a "random" item at this step.

How will users find characters they want?

How will users know how to get characters?

Results

Formative Study

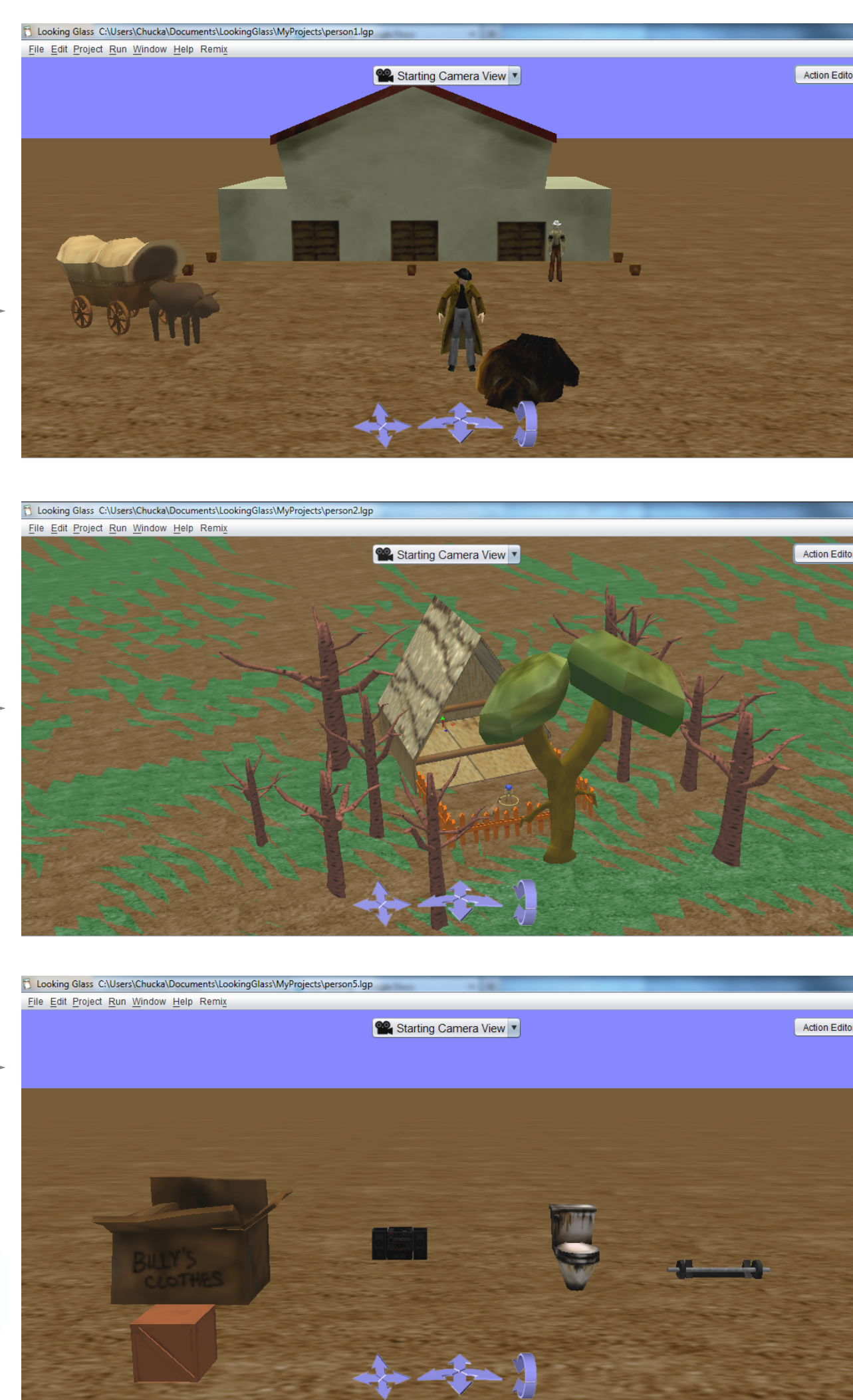
Task: Make a scene with at least 5 characters relating to the theme:

- Old west
- Classroom
- Cabin in the woods

confused regarding role of code and meaning of character editing, searched for "character," used related characters

searched for specific items, frustrated with placement and positioning tools

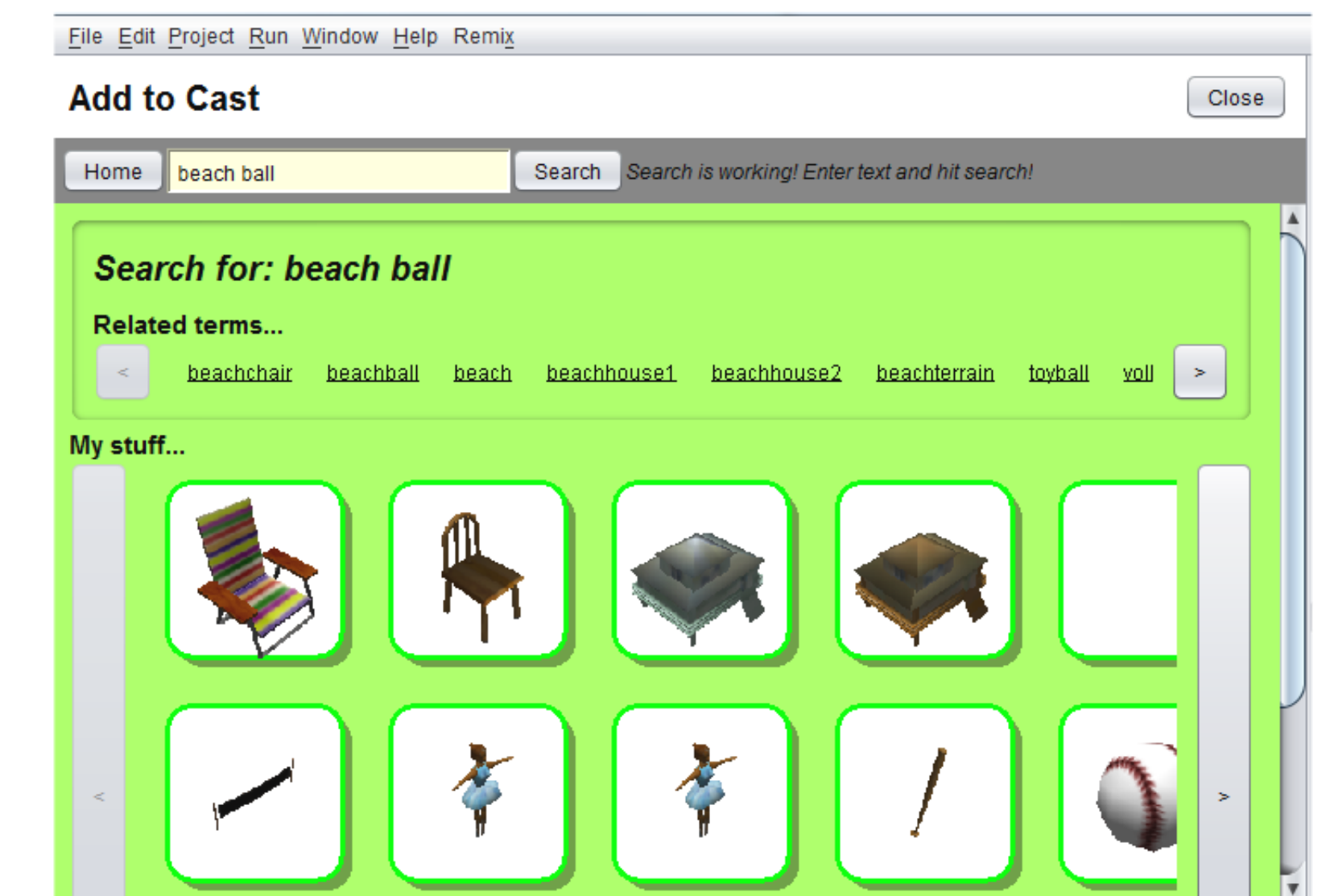
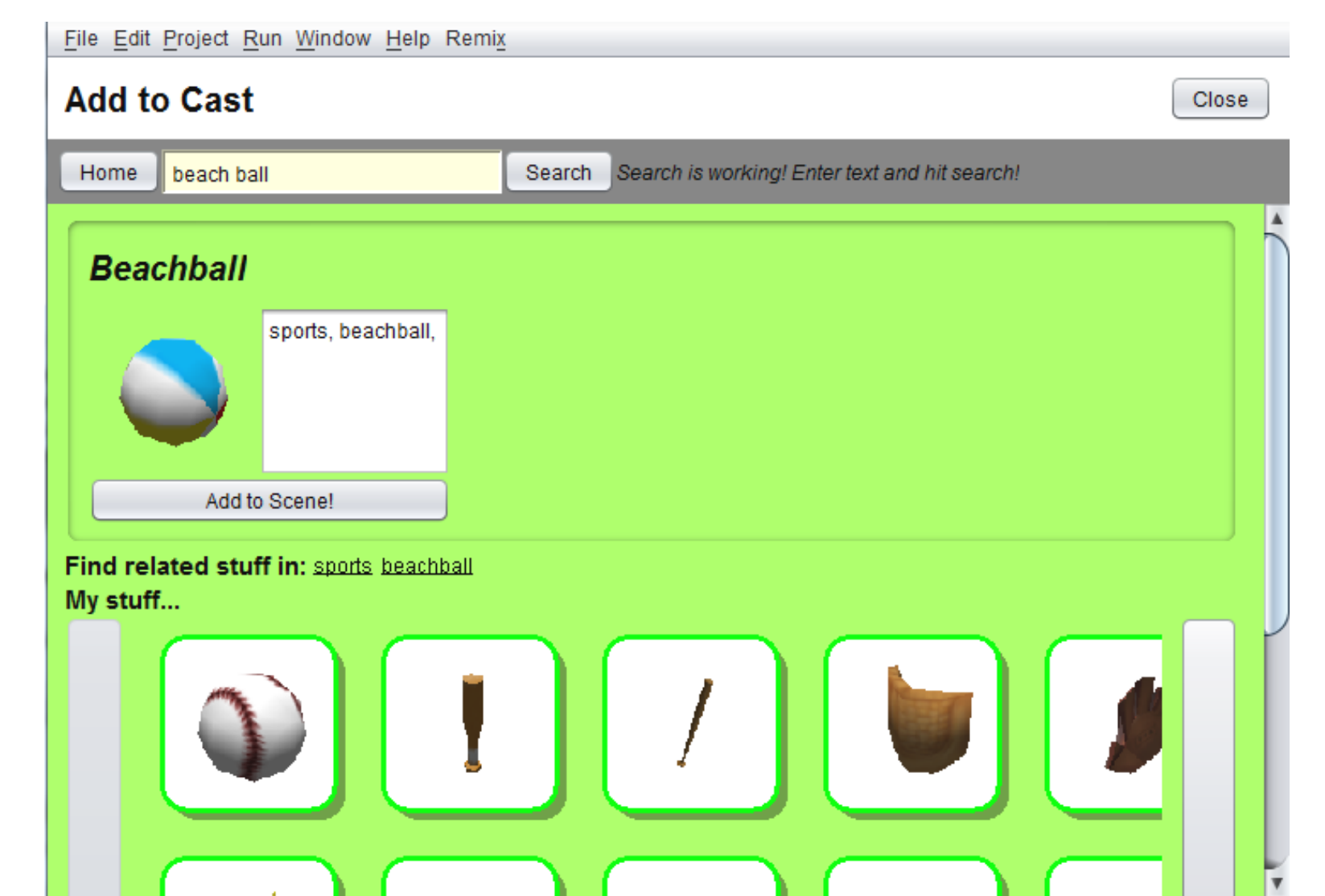
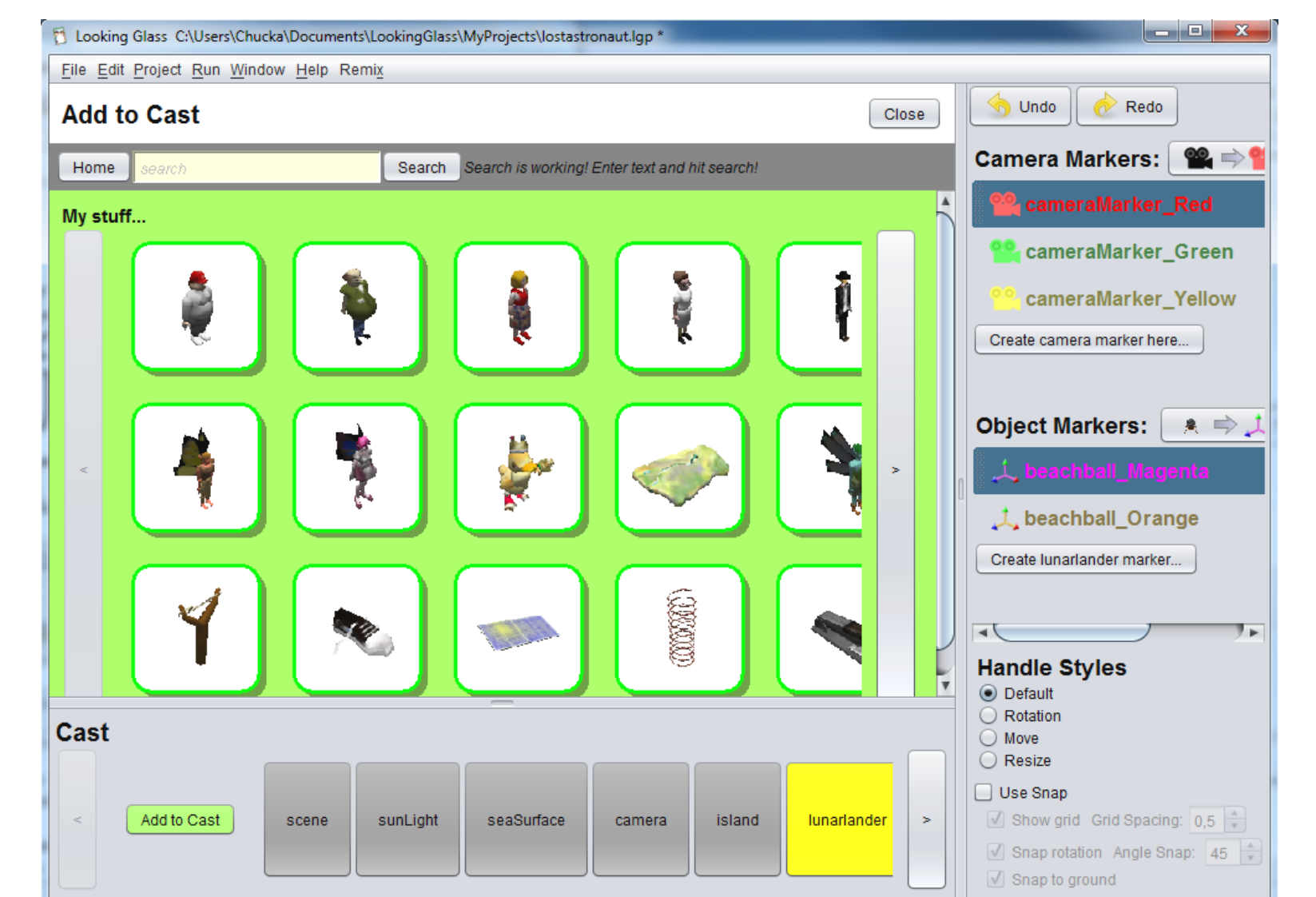
discouraged when could not find wall or ceiling elements, browsed from "home"



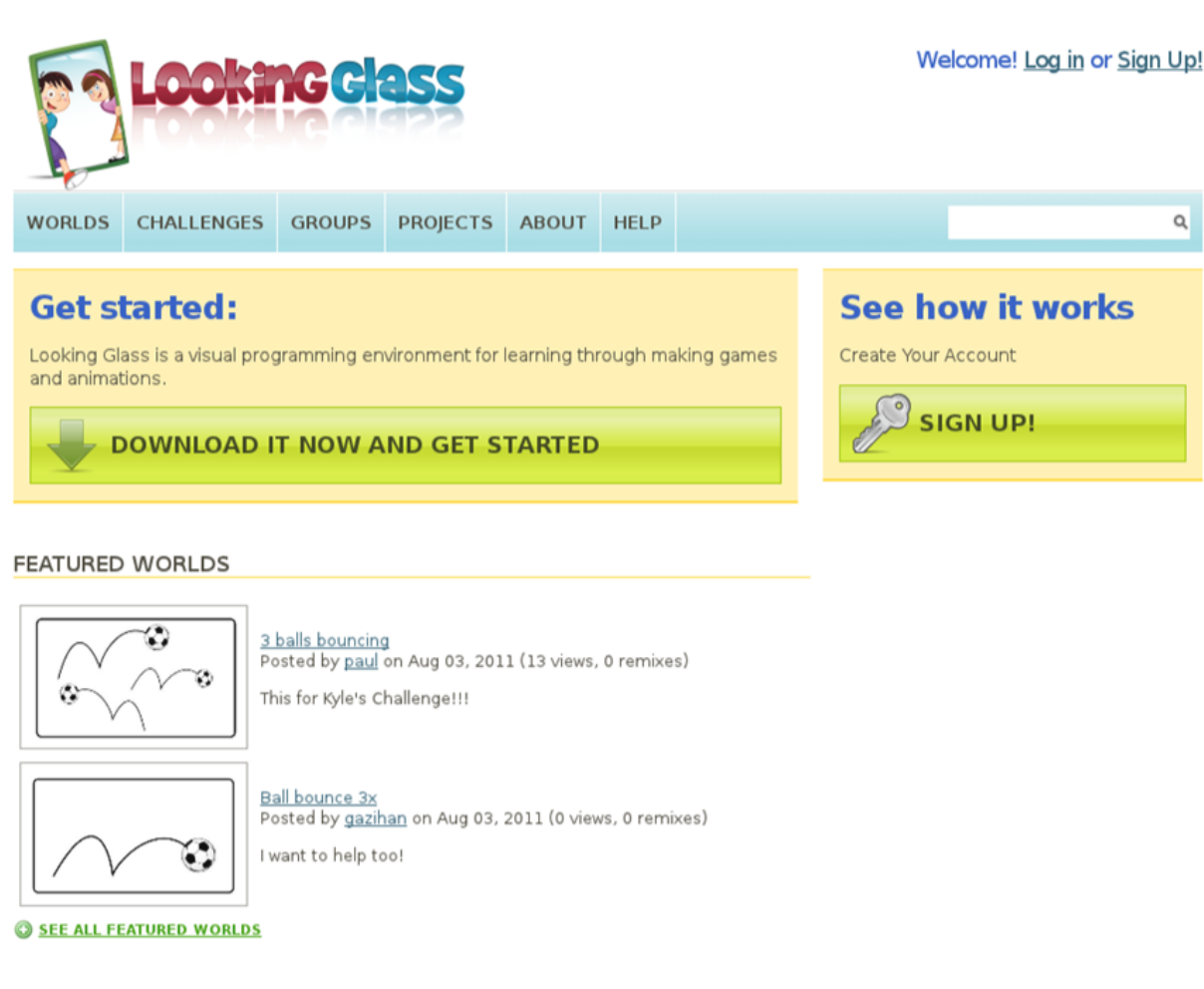
"Home"
Displays a custom selection of characters. Eventually incorporate user's history and skill level.

Character Info
Displays a character's tags, related tags and characters. Eventually show worlds and challenges in which it is featured.

Search
Searches by tags, shows relevant characters.



Future Work



- Consideration of environments, esp. for indoor scenes
- Associate tags with imagery
- Integration with online community
- Incorporate Sims 2 assets donated by Electronic Arts

Literature Cited

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