LAHAINASIM

FIRST PLACE CODED SOLUTION - HAWAII ANNUAL CODE CHALLENGE 2023
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HACC Challenge

- Lahaina, Maui was devastated by the August fires, causing the following problems: housing crisis, loss of Front St business, environmental mismanagement, and slow traditional planning
- The goal was to create a web portal to facilitate civic engagement around rebuilding Lahaina, including surveys, forums, sharing design concepts with visual and data models for economic, environmental analysis

Features Delivered

- 3D Modeling: Upload customized 3D models of Lahaina infrastructure
- Virtual Simulation: Explore virtual Lahaina with integrated 3D modeling
- Discussions: Foster community engagement through comments and threads
- Statistics: View statistics of Lahaina
- Generative AI: Rapidly brainstorm urban planning ideas for the restoration of Lahaina

Technologies Used

- ReactJS, HTML, CSS, JavaScript, MongoDB, Bootstrap UI
- Digital Ocean for deployment
- Mapbox to simulate a map of Lahaina with models
- Dall-E for image generation to enrich uploaded models
- Amazon S3 to store 3D models
- Places API for precise navigation to address inputs
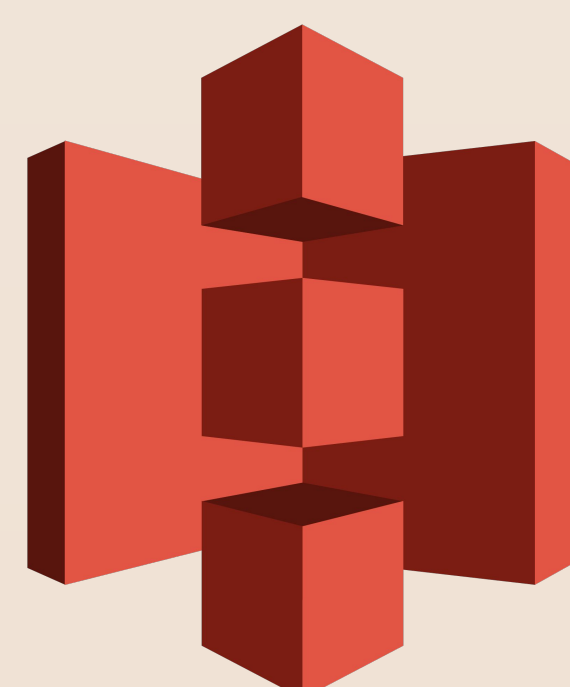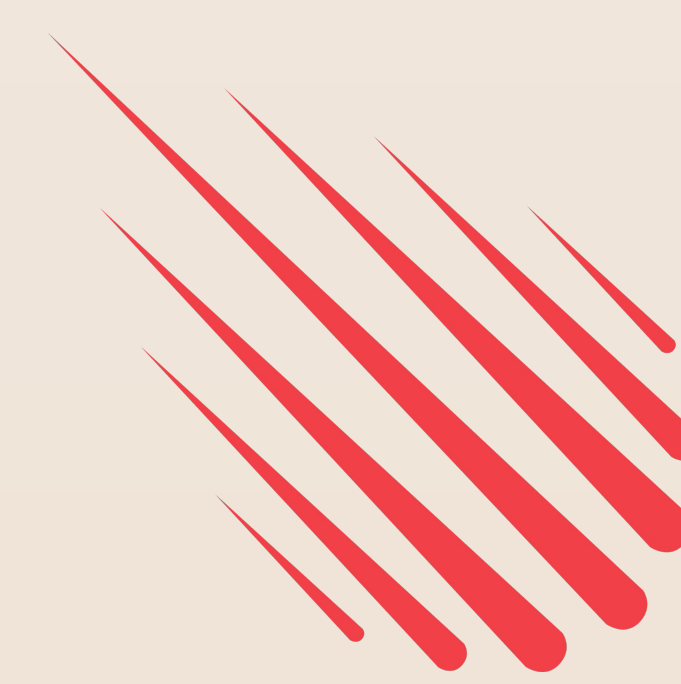
Primary Features

Share 3D Models
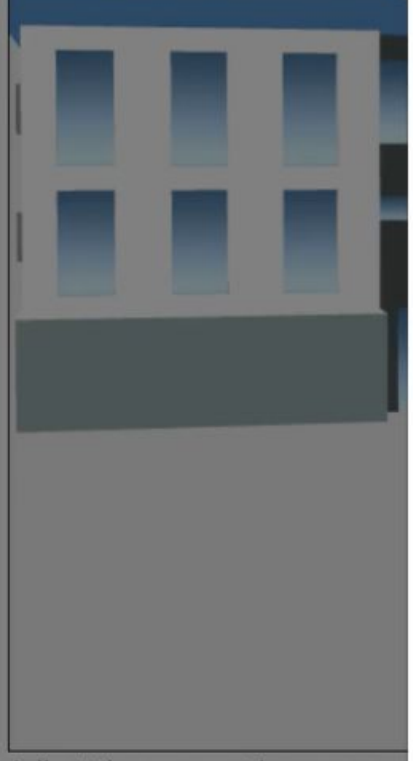
Create Simulations
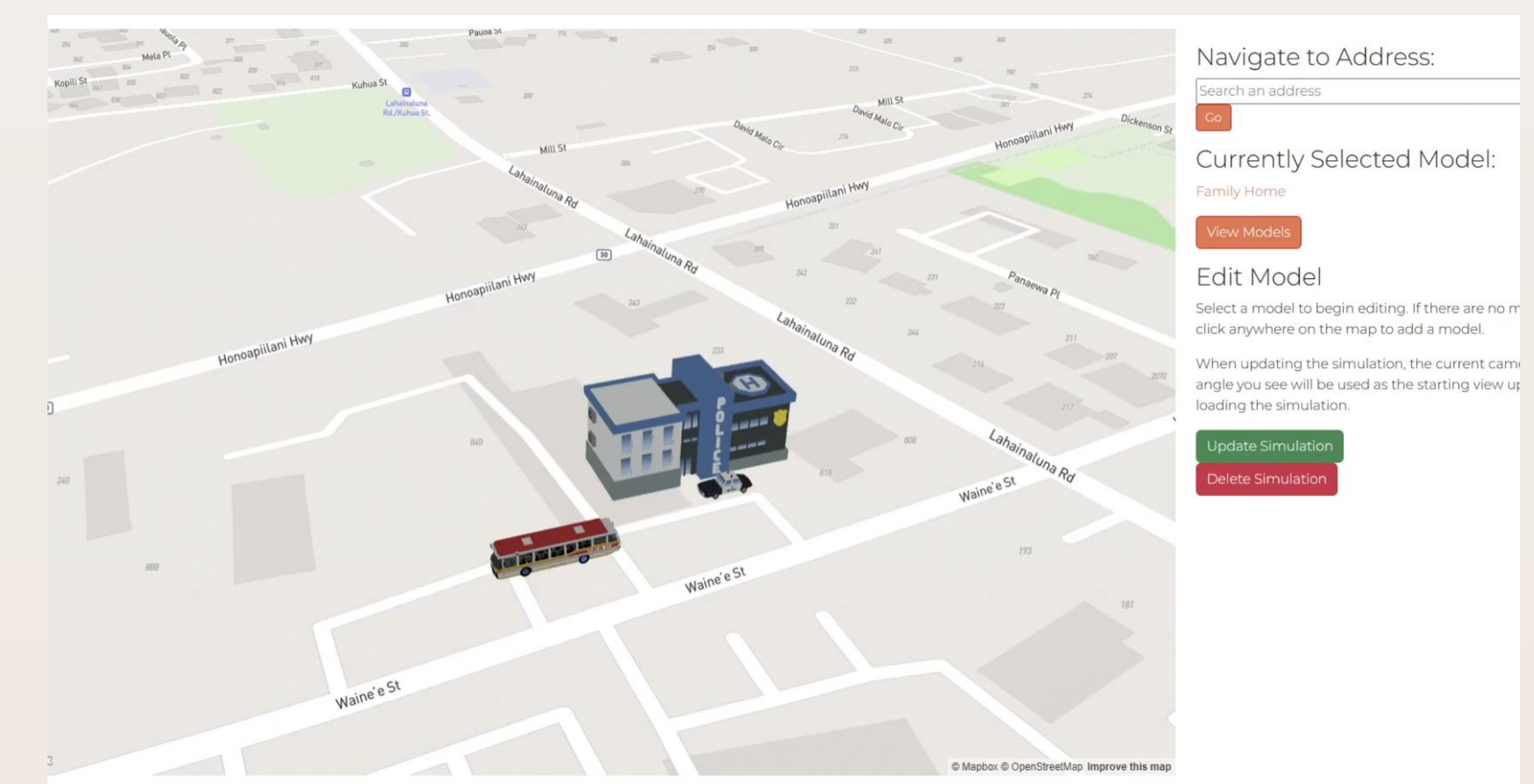
Dall-E Generative AI for Images

View Statistics of Lahaina
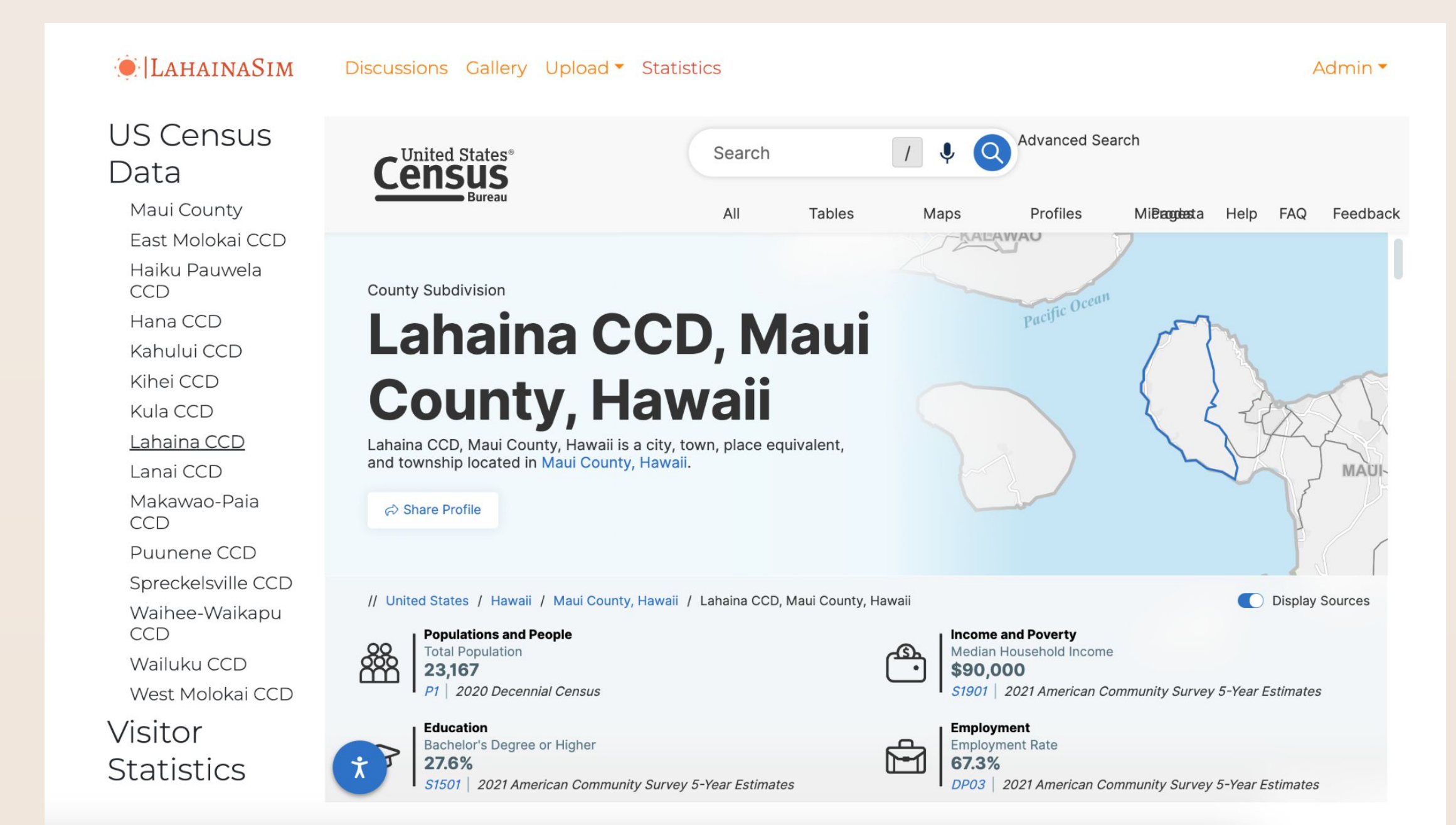
Collaborate on Discussions