MICHIGAN STATE UNIVERSITY

Alpha Presentation

Live Platform CAD Ingestion

The Capstone Experience

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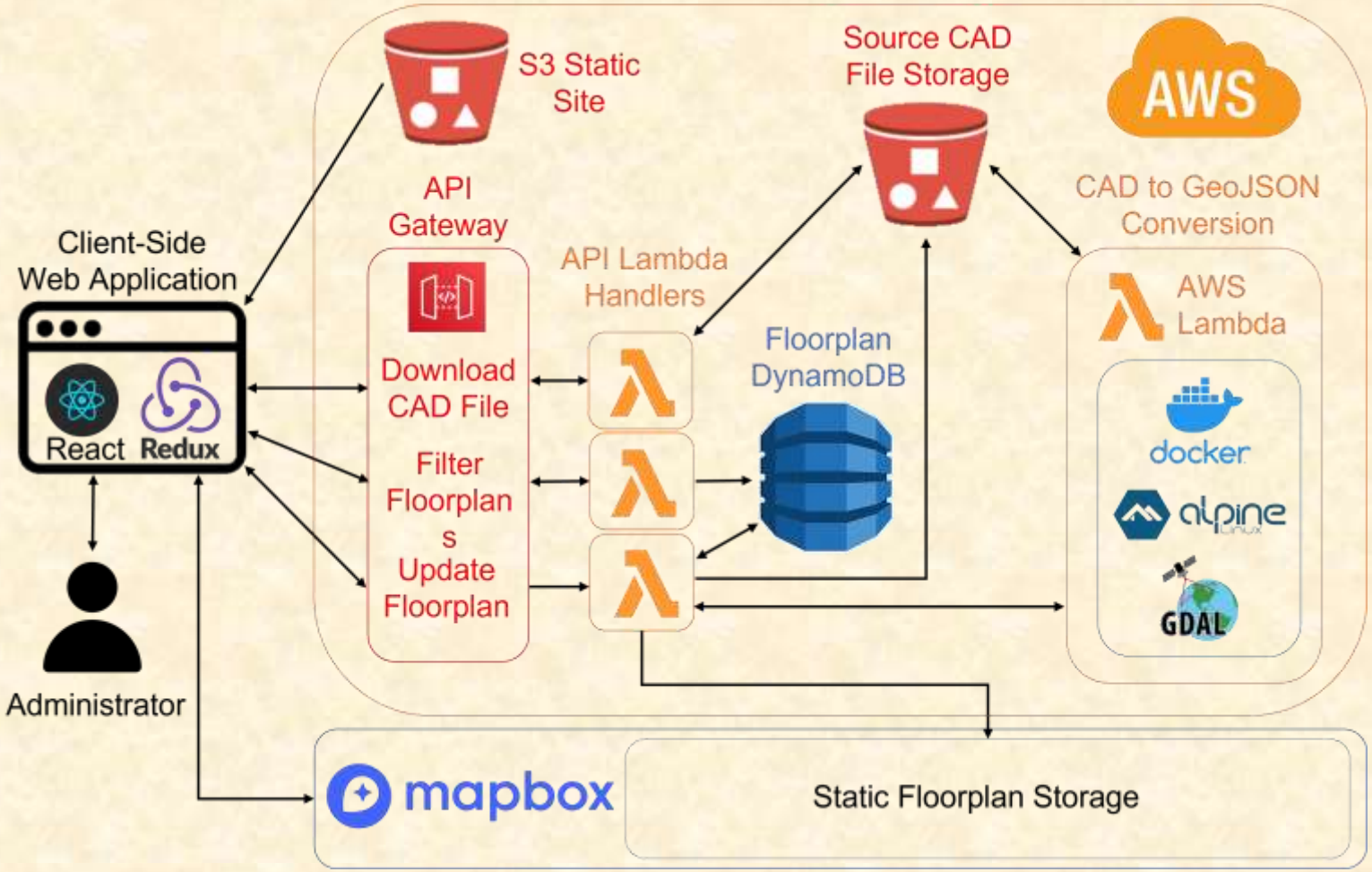
From Students…
…to Professionals

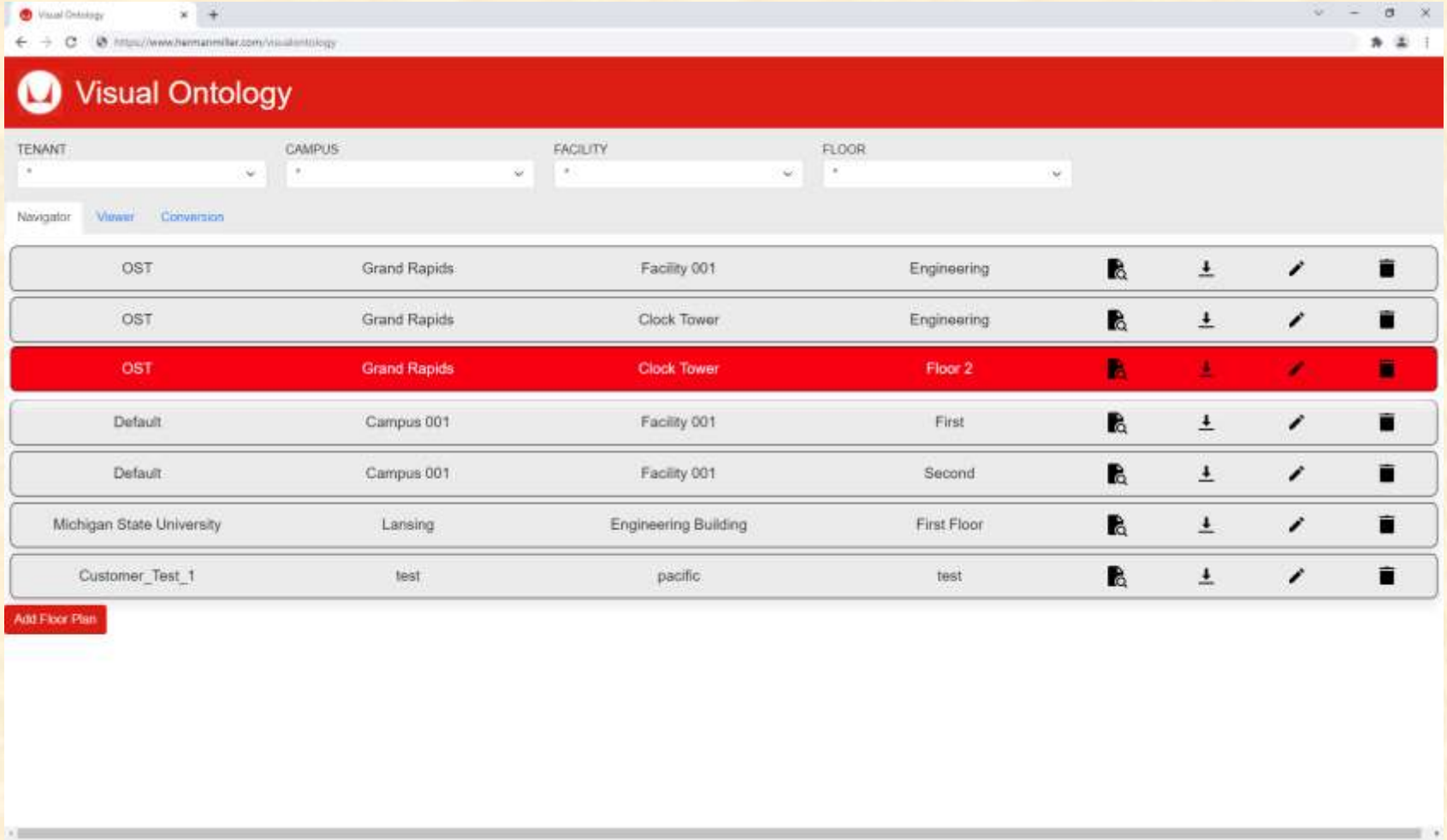
Project Overview

- Herman Miller is a globally recognized provider of furnishings and related services and technologies
- Live Platform allows users to visualize and analyze their workspaces
- Implement ability to ingest CAD files into mapping system instead of images
- Create a standalone web application to allow administrators to view and modify floorplans

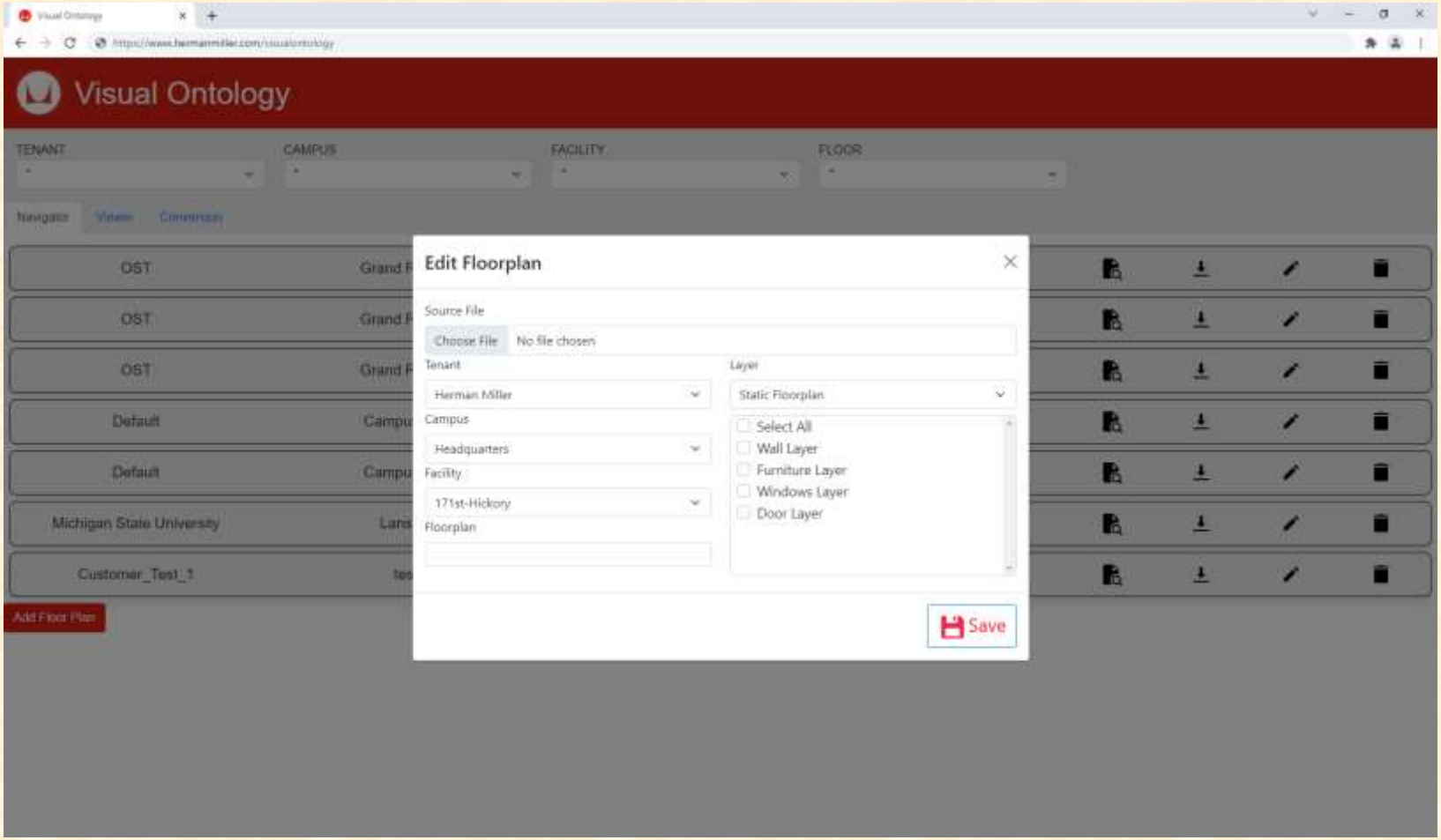
System Architecture



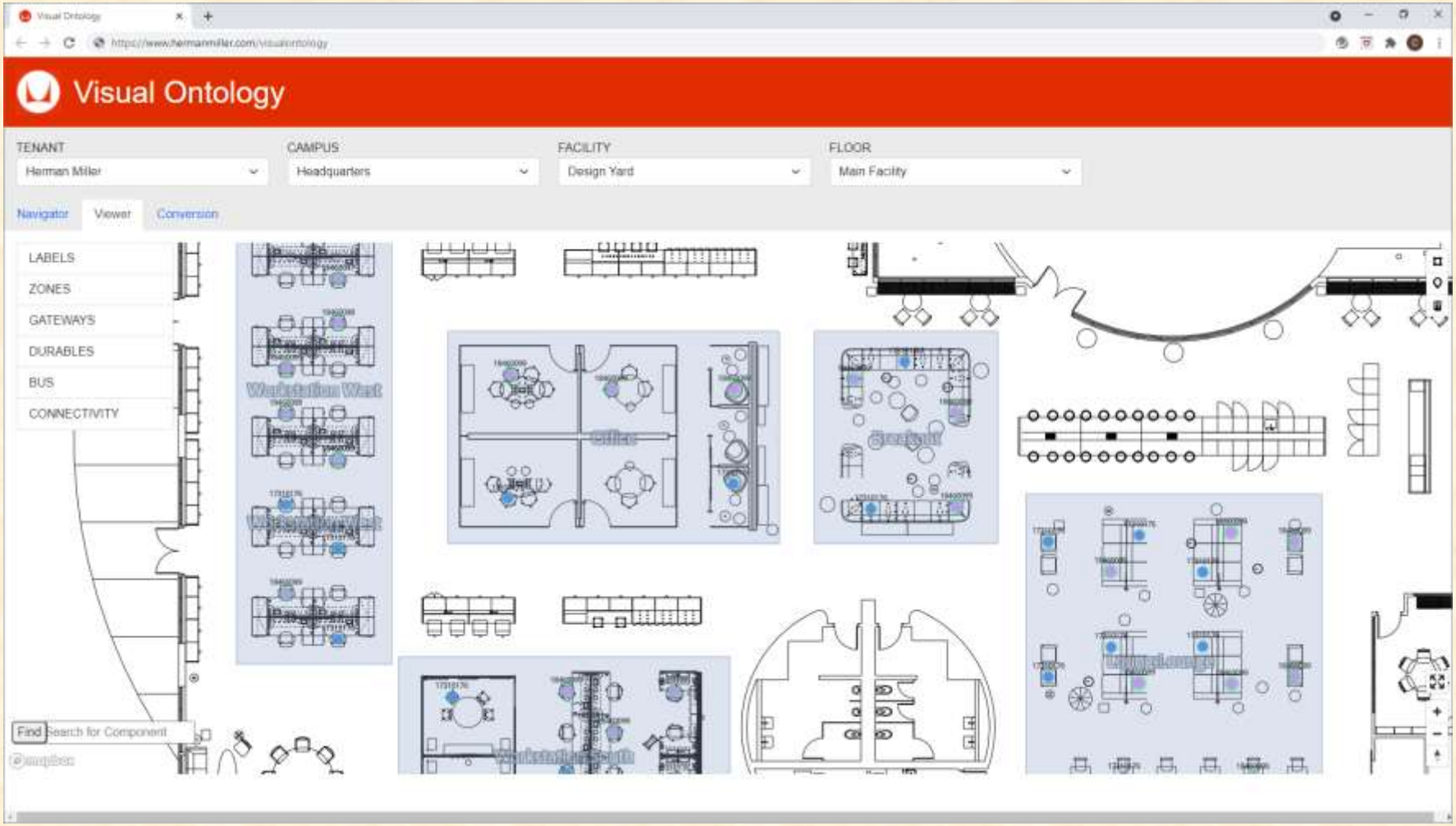
Navigator Page



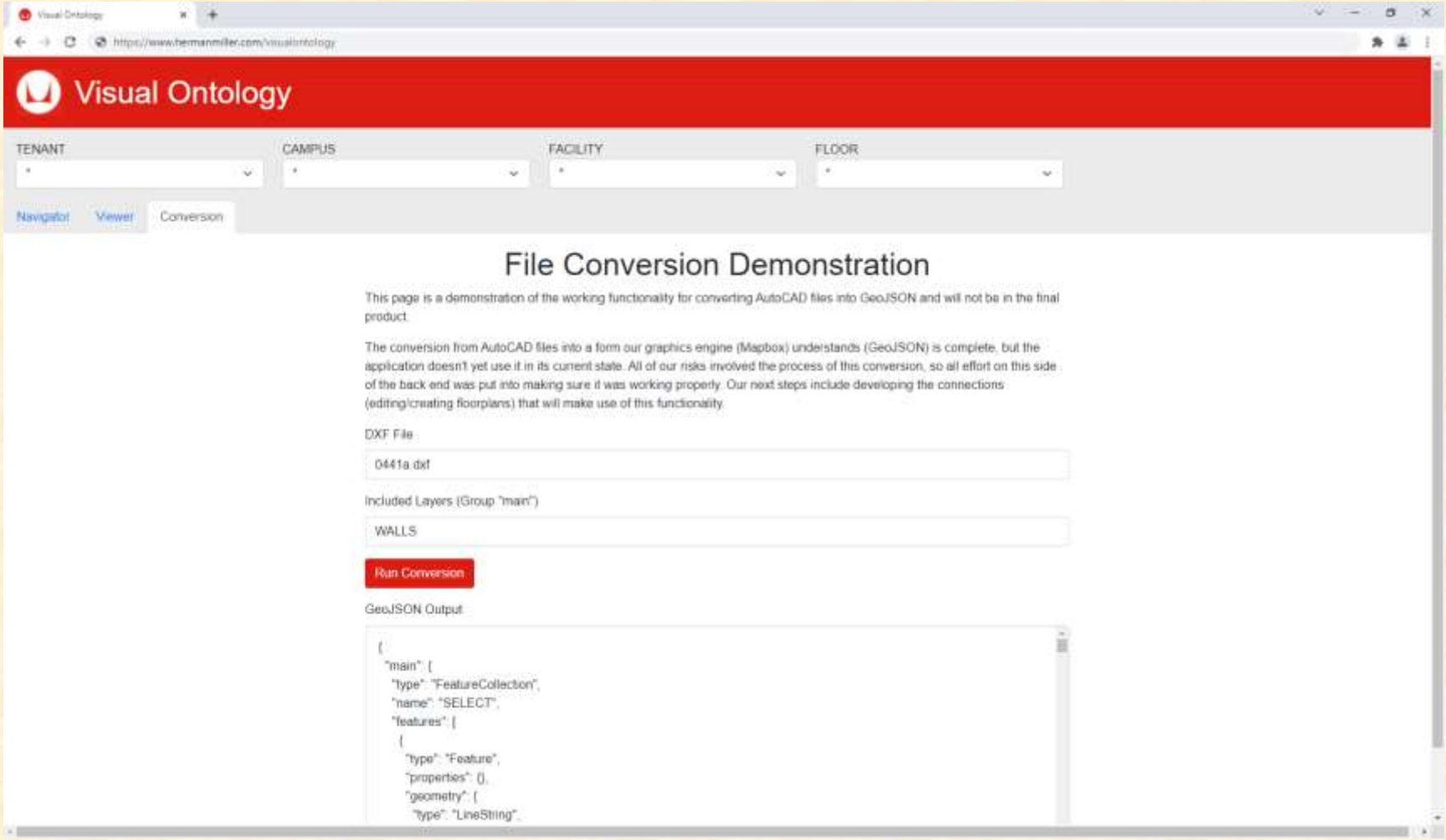
Navigator Page Edit Window



Viewer Page


Visual Ontology
TENANT
Herman Miller
CAMPUS
Headquarters
FACILITY
Design Yard
FLOOR
Main Facility
Navigator
Viewer
Conversion
LABELS
ZONES
GATEWAYS
DURABLES
BUS
CONNECTIVITY
Find
Search for Component

Conversion Page



What's left to do?

- Add and edit individual floorplans through the navigator page
- Add and edit sensors, zones and gateways on a selected floorplan in the viewer page
- Download source CAD files from floorplans
- Implement algorithm to enforce sensor hardware constraints
- Add more advanced error and state handling

Questions?