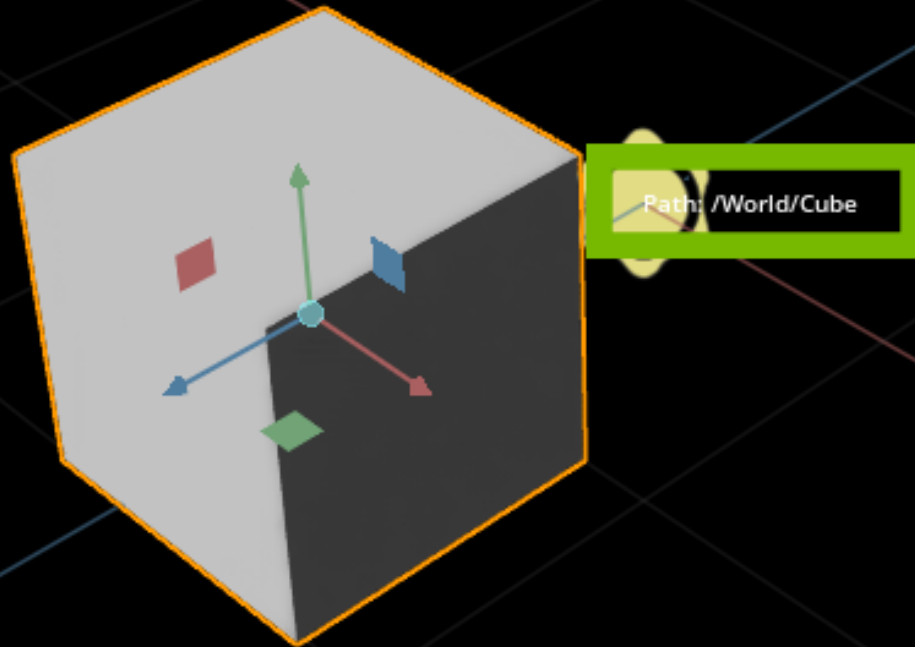


HSML Form Generation Website

Big Picture/Goals

- No-friction way to generate HSML objects
 - Used later for registering ownership (Alicia's HSML API)
 - ...and for syncing changes in real-time (Jared/Sub's producer/consumer scripts and database)
- Easily maintainable, low-code
 - Avoid having to make SMEs perform a task they're unfamiliar with/don't like (coding) to do their main job (validating designs in a digital twin environment)

RTX - Real-Time



Omniverse AI Plugin

- Select an object in Omniverse
- "Base" HSML (ex. Entity) is generated by a LLM for the object, for later manipulation for registration (API) and syncing changes (pub/sub)

```
1  {
2    "@context": "https://digital-twin-interoperability.github.io/hsml-schema-context/hsml.jsonld",
3    "@type": "Agent",
4    "name": "Cadre_1",
5    "swid": "did:key:generate-Chassis-001",
6    "identifier": {
7      "@type": "schema:PropertyValue",
8      "propertyID": "schema_Chassis",
9      "value": "Chassis-001"
10   },
11   "url": "1hF_bUKvJWxV2SMVLj4wQ2Mg_vb_F9oK0",
12   "creator": {
13     "@type": "Person",
14     "name": "Jared Carrillo"
15   },
16   "dateCreated": "2024-01-01",
17   "dateModified": "2024-12-06T15:31:17",
18   "encodingFormat": "application/x-obj",
19   "contentUrl": "https://example.com/models/3dmodel-001.obj",
20   "description": "Rover data with world position and rotation",
21   "platform": "Omniverse",
22   "spaceLocation": [
23     {
24       "@type": "Hyperspace",
25       "name": "Moon"
26     }
27   ],
```

Issues

- User input frequently needed
 - LLM may inaccurately describe an object, doesn't know the URL the object is hosted at, etc
- Complexity of maintaining
 - Coding separate plugins for Omniverse, Unity, Unreal, and whatever comes next (TINA, etc)



Create HSML Object

Select HSML Type:

Person

Name:

Birth Date (YYYY-MM-DD):

YYYY-MM-DD

Email:

Generate HSML JSON



Generated HSML JSON

```
{
  "@context": "https://digital-twin-interoperability.github.io/hsml-schema-context/hsml.jsonld",
  "@type": "Person",
  "name": "Gerald Parish",
  "birthDate": "1998-09-09",
  "email": "grparish@uark.edu"
}
```

[Download HSML JSON](#)

[Create another](#)

MVP Goals

- Five categories:
 - Person
 - Agent
 - Entity
 - Credential
 - Organization
- Integrate with HSML API/provide a front-end for the HSML API