



Alpha Presentation

SmartSat™ Satellite App Store

The Capstone Experience

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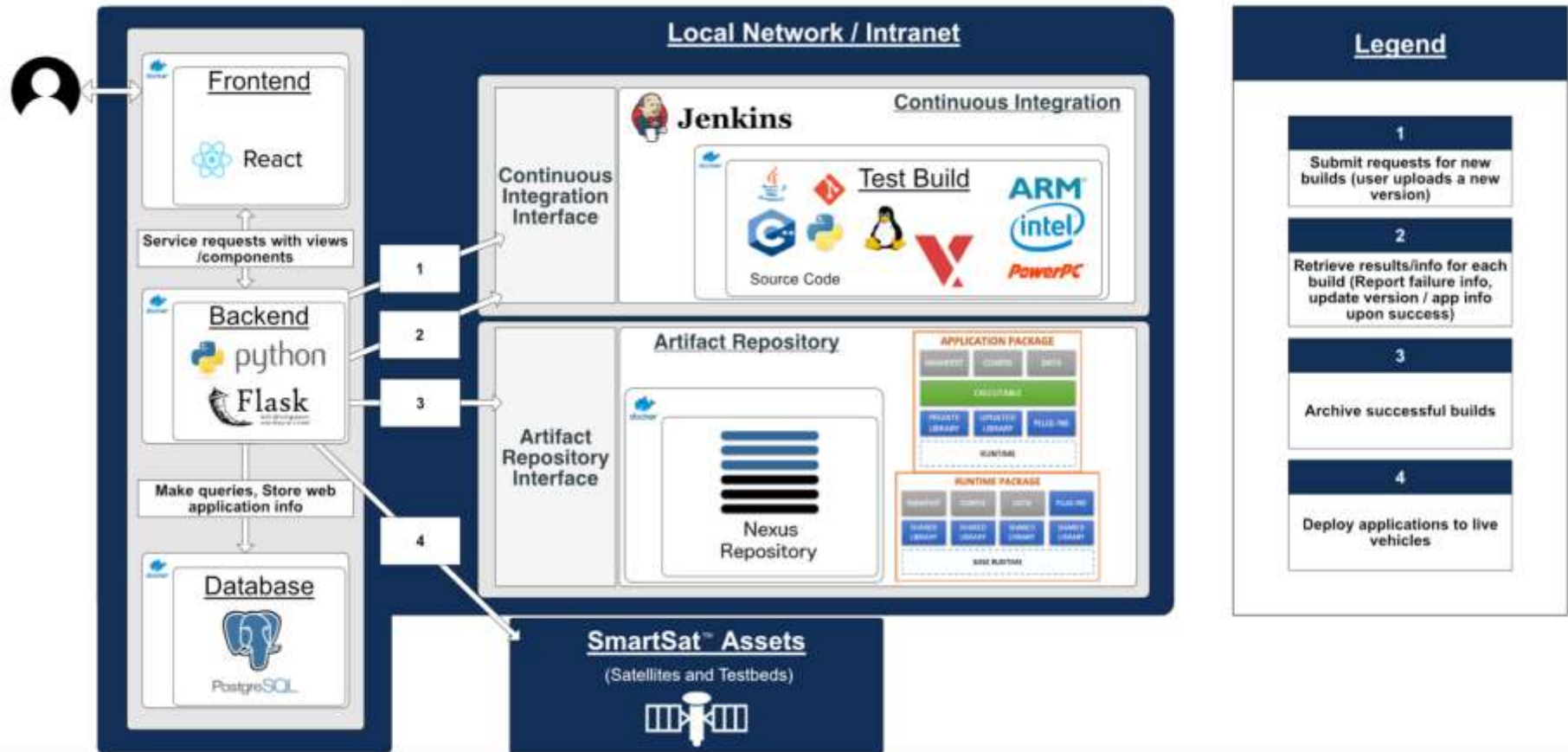


*From Students...
...to Professionals*

Project Overview

- Lockheed Martin SmartSat™ applications expand the capabilities of satellites
- Clients and developers require a way to manage and browse existing applications
- SmartSat™ App Store acts as the central access point for satellite applications
- Users can upload and download applications with ease

System Architecture



What's left to do?

- Cross Platform Support
 - Git Repository (Project Uploads)
 - VxWorks, Embedded Linux (Compatibility Testing)
- Hardware Deployment
- Expanded Features for Managing Assets
- Social and Collaborative Features
- State Management
- User Authentication



Questions?

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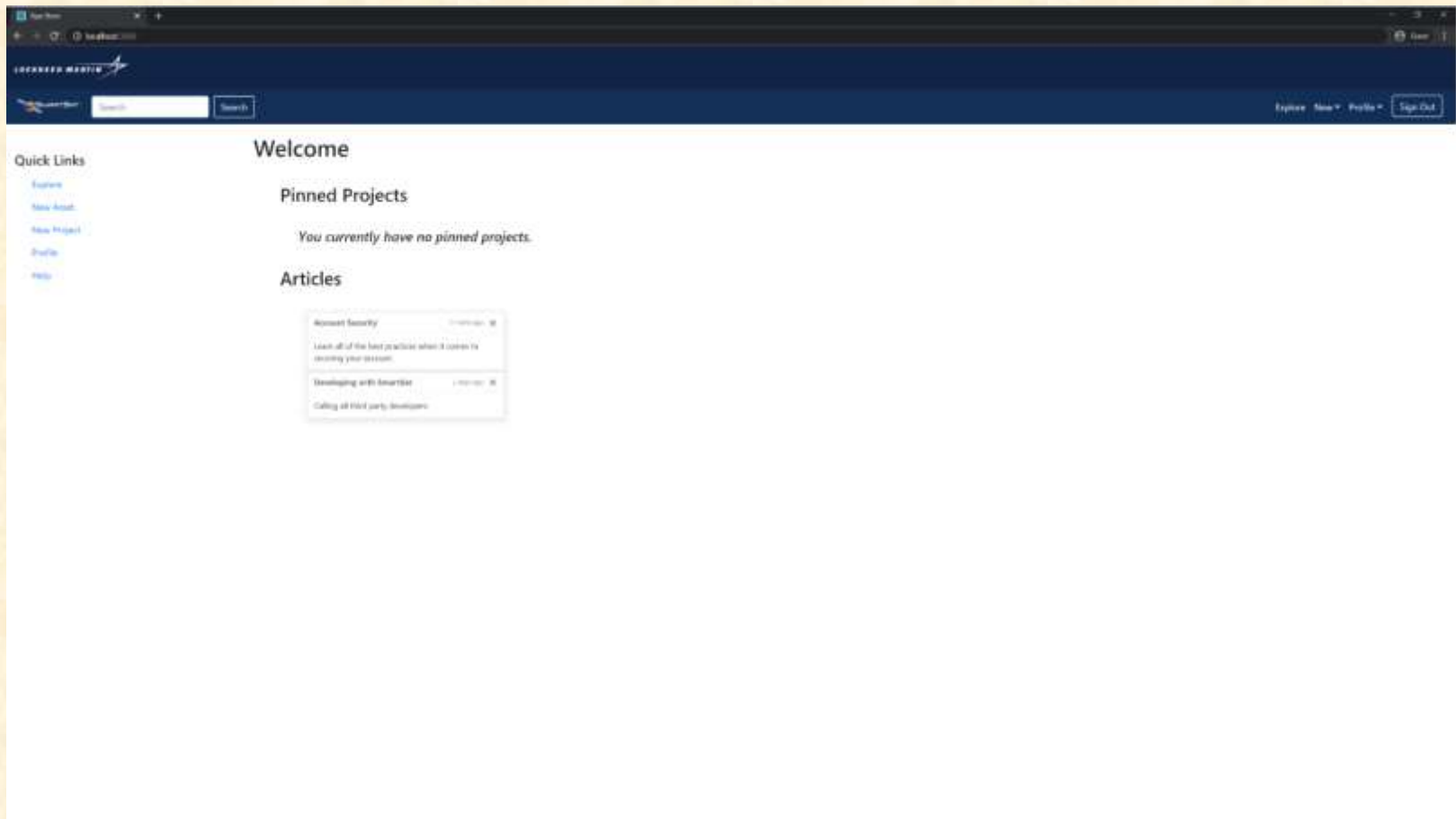
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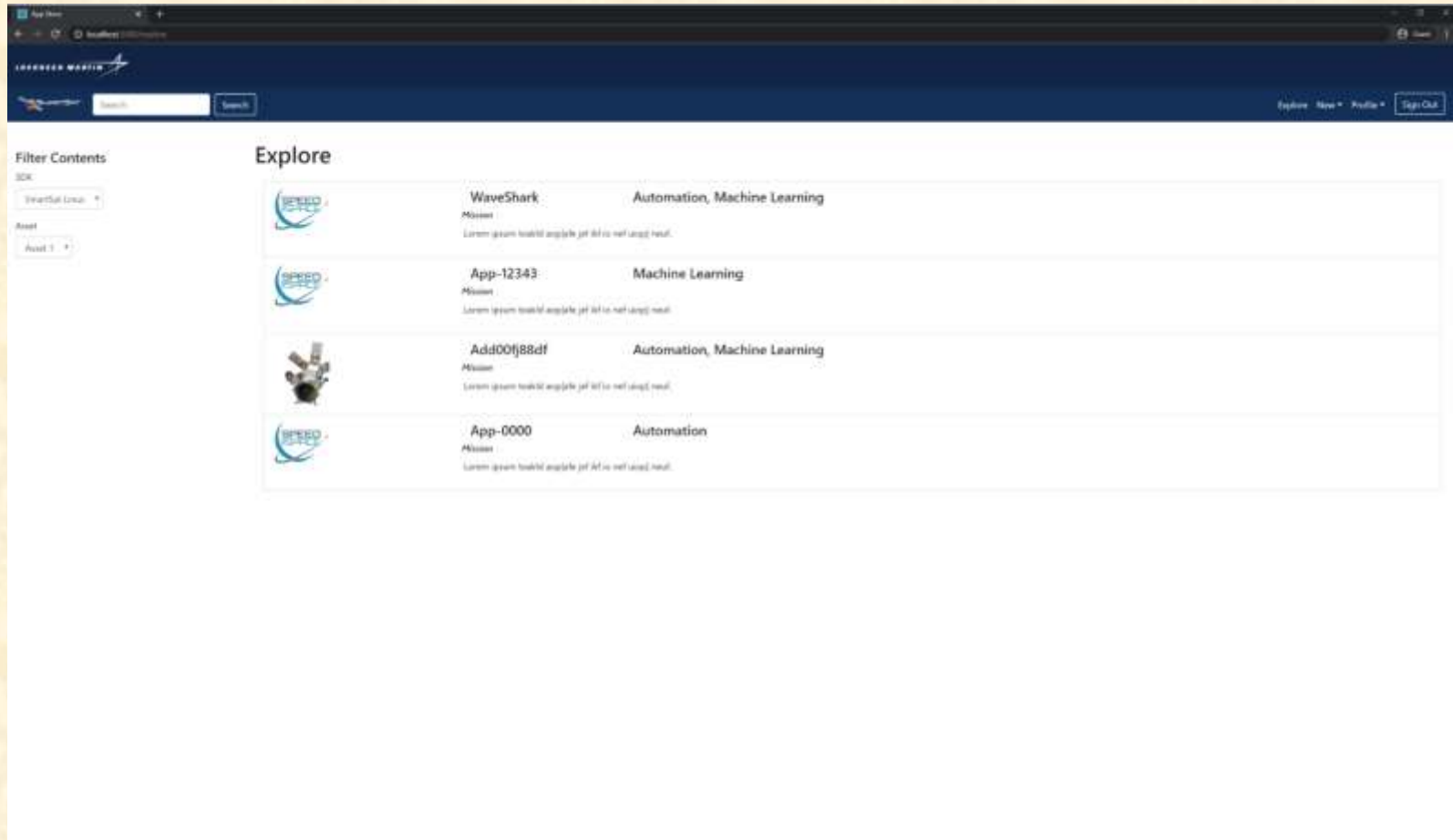
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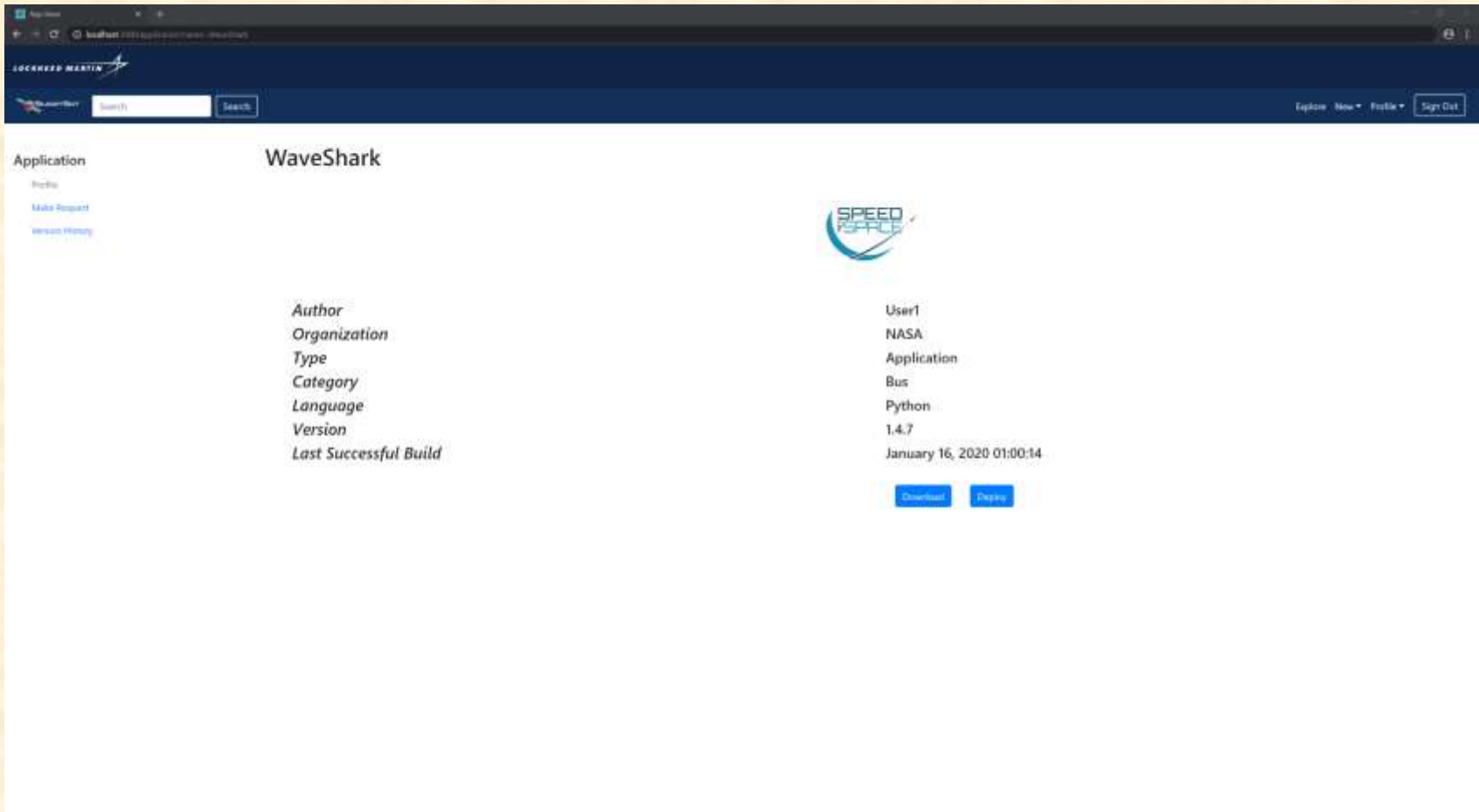
SmartSat™ Home Page



SmartSat™ Explore Page



SmartSat™ App-Profile Page



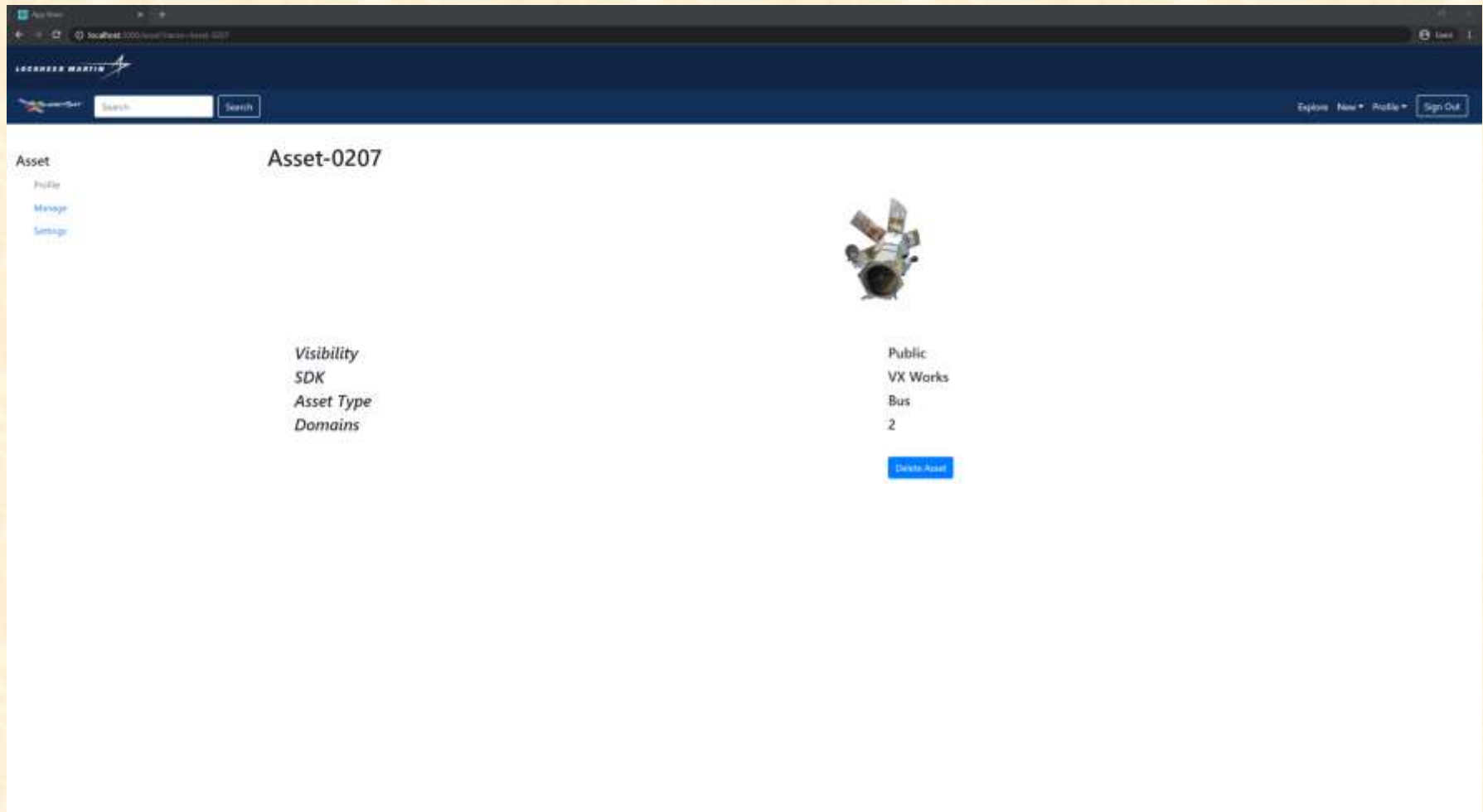
The screenshot shows the SmartSat App-Profile Page for an application named "WaveShark". The page is part of the Lockheed Martin Space Alpha environment. The header includes the Lockheed Martin logo, a search bar, and navigation links for Explore, New, Profile, and Sign Out. The main content area displays the application name "WaveShark" and a list of metadata fields on the left, with their corresponding values on the right. A "Speed of Space" logo is also visible. At the bottom right, there are "Download" and "Deploy" buttons.

| Field | Value |
|-----------------------|---------------------------|
| Author | User1 |
| Organization | NASA |
| Type | Application |
| Category | Bus |
| Language | Python |
| Version | 1.4.7 |
| Last Successful Build | January 16, 2020 01:00:14 |

Buttons: [Download](#) [Deploy](#)



SmartSat™ Asset Profile Page



SmartSat™ Asset Manage Page

The screenshot shows the SmartSat Asset Manage Page for Asset-0207. The page has a dark blue header with the Lockheed Martin logo and a search bar. On the left, there is a sidebar with links for Profile, Manage, and Settings. The main content area displays the asset name 'Asset-0207' and a satellite icon. Below this, there is a table showing the status of the asset across two domains. Domain 0 is running the SDK/CFC-400 SmartSat Linux 2019.1 with 74% free space, 1 running instance, and 1 installed instance. Domain 1 is also running the same SDK/CFC-400 SmartSat Linux 2019.1 with 0% running instances and 0 installed instances. A table lists the applications, with 'WaveShark' version 1.54 running on Domain 0. A 'Remove' button is visible next to the running application.

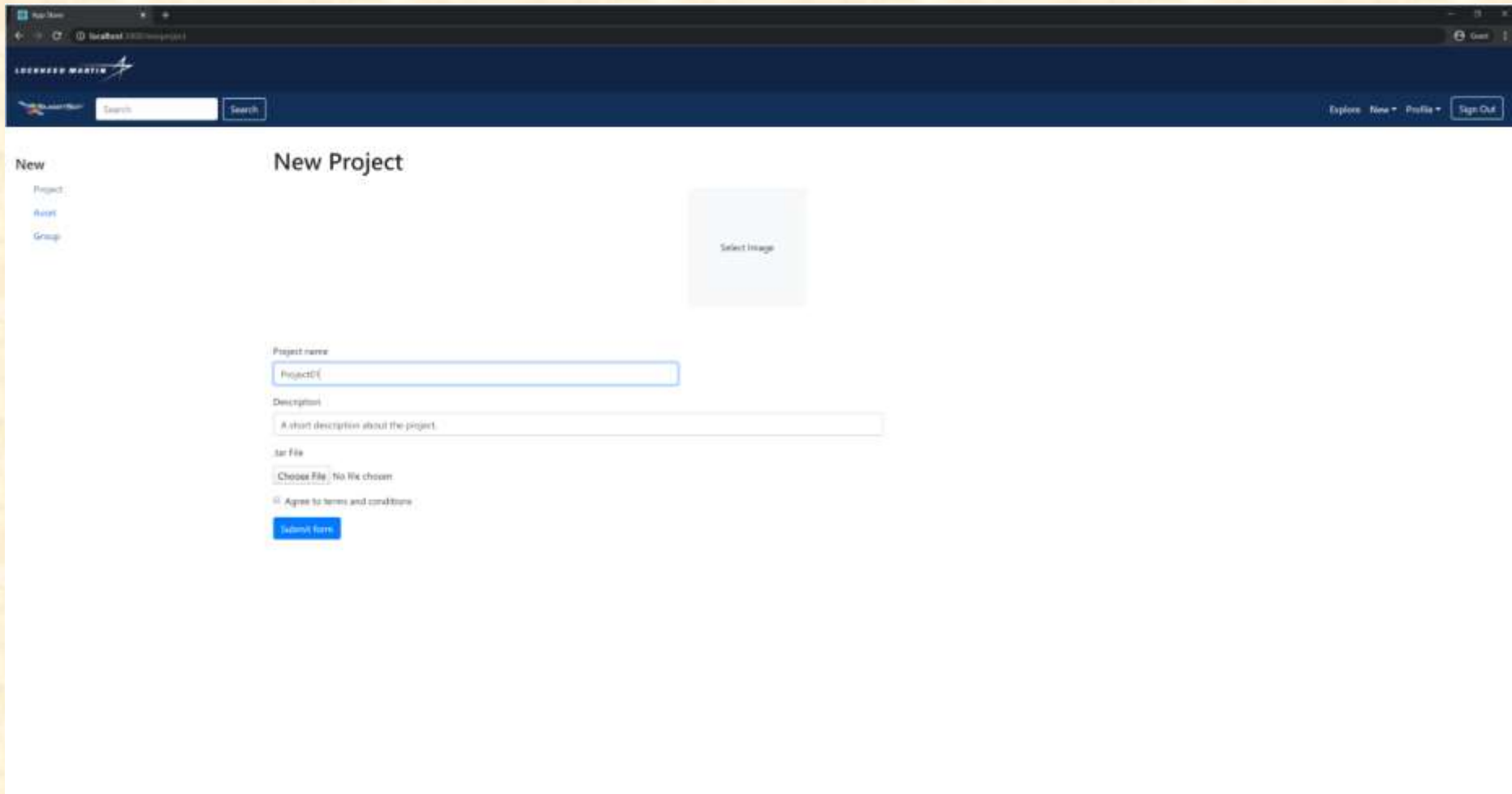
| # | Application | Version | Status |
|---|-------------|---------|---------|
| 1 | WaveShark | 1.54 | Running |

Domain 0
SDK/CFC-400 SmartSat Linux 2019.1
Free Space: 74%
Running: 1
Installed: 1

Domain 1
SDK/CFC-400 SmartSat Linux 2019.1
Running: 0
Installed: 0



SmartSat™ New Project Page



The screenshot shows a web browser window with the URL "localhost:3000/newproject". The page has a dark blue header with the "LOCKHEED MARTIN" logo and a search bar. On the right side of the header are links for "Explore", "New", "Profile", and a "Sign Out" button. The main content area is titled "New Project" and features a sidebar on the left with links for "Project", "Asset", and "Group". The "Project" link is highlighted. The main form includes a "Select Image" button, a "Project name" input field containing "Project01", a "Description" input field with placeholder text "A short description about the project.", a "Jar File" section with a "Choose File" button and the text "No file chosen", a checkbox for "Agree to terms and conditions", and a blue "Submit Form" button.

LOCKHEED MARTIN

Search

Explore New Profile Sign Out

New

Project Asset Group

Select Image

Project name

Project01

Description

A short description about the project.

Jar File

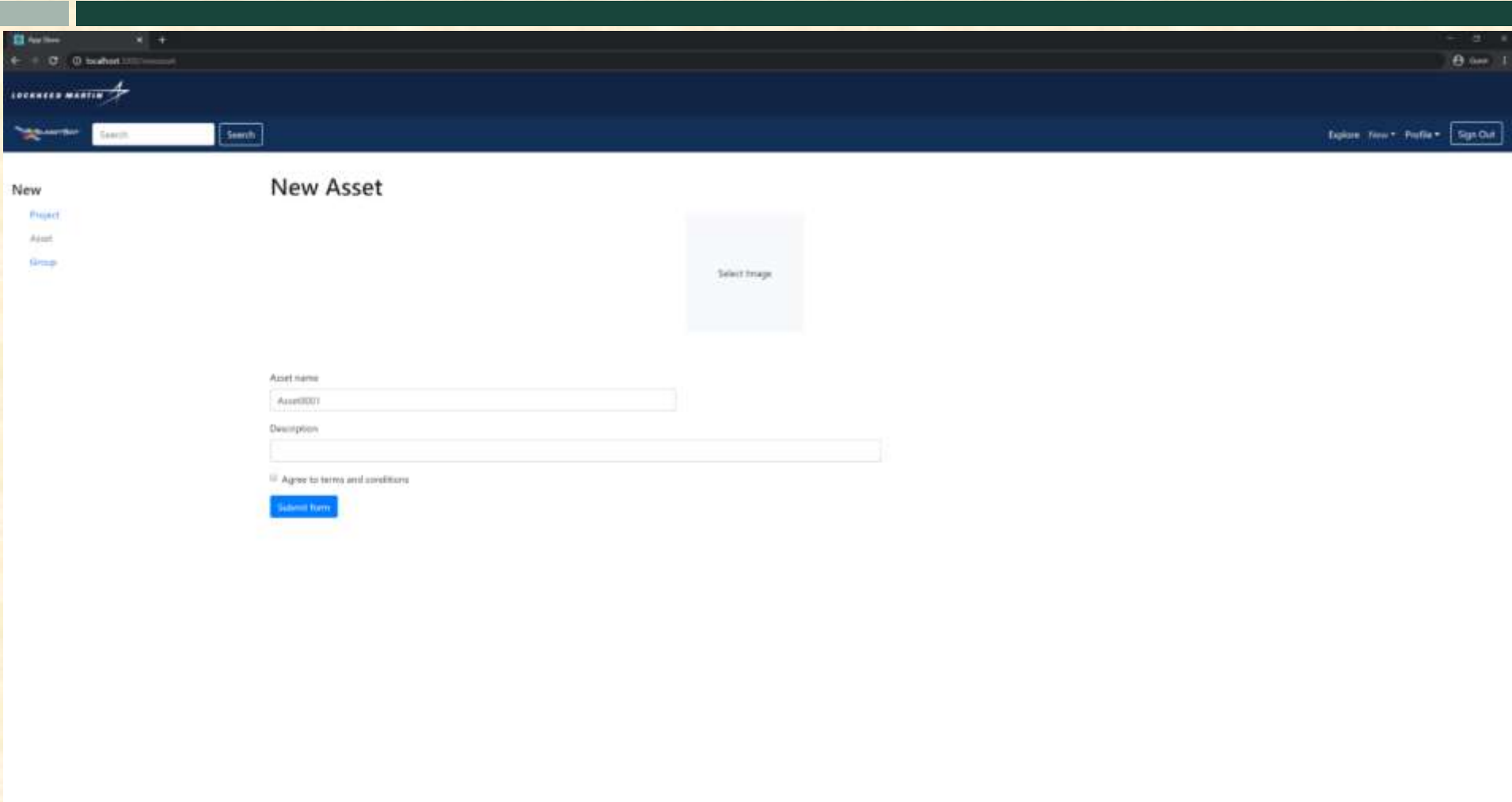
Choose File No file chosen

☐ Agree to terms and conditions

Submit Form



SmartSat™ New Asset Page



The screenshot shows a web browser window displaying the 'New Asset' page of the SmartSat™ application. The browser's address bar shows 'localhost:3000'. The page has a dark blue header with the 'LOCKHEED MARTIN' logo and a search bar. On the left, a sidebar lists 'New' options: 'Project', 'Asset', and 'Group'. The main content area is titled 'New Asset' and features a large light blue box with the text 'Select Image'. Below this, there are input fields for 'Asset name' (containing 'Asset001') and 'Description'. A checkbox labeled 'Agree to terms and conditions' is checked. At the bottom, there is a blue 'Submit form' button.

App Store

localhost:3000

LOCKHEED MARTIN

Asset001

Search

Explore View Profile Sign Out

New

Project

Asset

Group

New Asset

Select Image

Asset name

Asset001

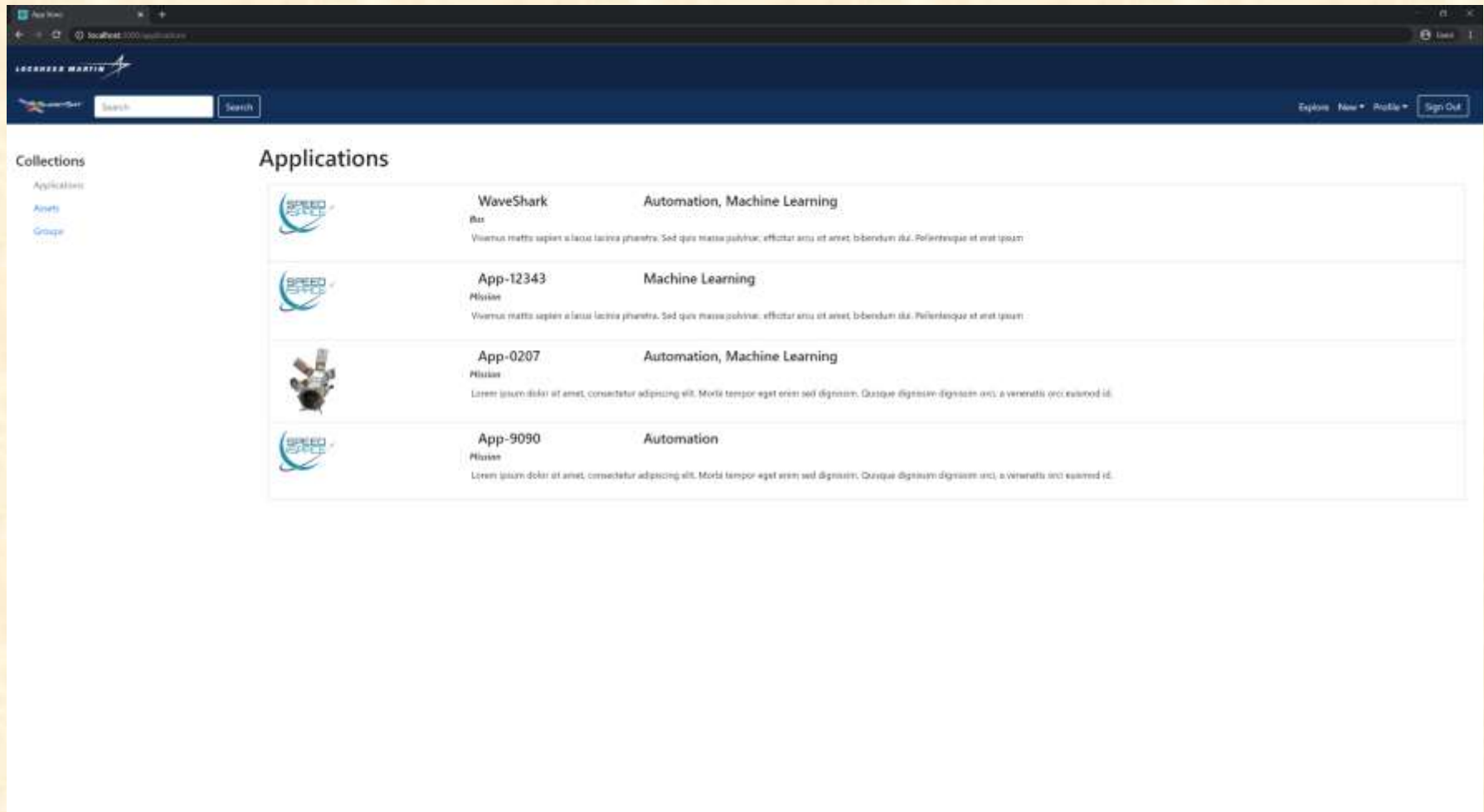
Description

☒ Agree to terms and conditions





Submit form



SmartSat™ Collections - Apps Page



The screenshot displays the SmartSat™ Collections - Apps Page. The page features a dark blue header with the Lockheed Martin logo on the left and a search bar in the center. On the right side of the header, there are links for 'Explore', 'How', 'Profile', and a 'Sign Out' button. Below the header, the page is divided into two main sections: 'Collections' on the left and 'Applications' on the right. The 'Collections' section has a sidebar with links for 'Applications', 'Assets', and 'Groups'. The 'Applications' section lists four applications, each with a logo, a title, a category, and a brief description.

| Logo | Application Name | Category | Description |
|---|------------------|------------------------------|---|
|  | WaveShark | Automation, Machine Learning | Vivamus mattis sapien a laus lacina phantia. Sed quis massa pulvinar, efficitur ante et amet, bibendum id. Pellentesque et erat ipsum. |
|  | App-12343 | Machine Learning | Vivamus mattis sapien a laus lacina phantia. Sed quis massa pulvinar, efficitur ante et amet, bibendum id. Pellentesque et erat ipsum. |
|  | App-0207 | Automation, Machine Learning | Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi tempor eget enim sed dignism. Quisque dignism dignism orci, a venenatis orci egestas id. |
|  | App-9090 | Automation | Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi tempor eget enim sed dignism. Quisque dignism dignism orci, a venenatis orci egestas id. |



SmartSat™ Collections - Assets Page

