**Automating Real Estate Data Integration for Assette**

Boston University MSBA Program | Summer 2025

**Team**

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**Project Overview**

Our team partnered with Assette, a SaaS platform for asset managers, to streamline how Real Estate data flows into their Snowflake data warehouse. Assette needed a scalable, automated solution to ingest, clean, and structure REIT data from multiple fragmented sources.

**Objectives**

Design and build a fully automated data pipeline that:

* Loads and classifies Real Estate holdings, products, portfolios, and benchmarks
* Links relevant tables in Snowflake using fully automated, strategy-based logic
* Integrates multi-source external financial data (e.g., Yahoo Finance, NAREIT)
* Populates production-ready tables in Snowflake to populate client & investor fact sheets

**Our Approach**

We developed a modular Python pipeline that:

* Scrapes and pulls live & trustworthy Real Estate data from reputable public sources
* Populates realistic performance metrics and informational metadata for individual securities, portfolios, products, and benchmarks
* Assigns & maps tables based on primary keys & attribute-based logic
* Transforms and loads the data into the Snowflake data warehouse, & populates the relevant tables according to Assette’s established schema

Inputs: Yahoo Finance API, NAREIT & REITNotes via webscraping, internal CSVs

Outputs: Fully structured Snowflake tables ready for reporting & analysis

**Key Outcomes**

* End-to-end automation: No more manual mapping or data entry
* Intelligent benchmark associations based on portfolio strategy
* Modular design: Each script reusable across future asset classes
* Production-grade output with logging and validation checks

**Client Impact & Outcomes**

* Assette now has a reliable foundation to expand Real Estate performance reporting across quantitative and qualitative fields for 8 of their tables in Snowflake
* This creates a time-saving process through automation, reduces risk of manual errors, and opens the door to scaling across new asset types
* The results of this project have moved Assette closer towards their goal of populating investor & client fact sheets with accurate data on Real Estate investments