

Slide 1: Introduction — Who I Am

“Hi everyone, I’m [Your Name], currently pursuing my B.Tech in Information Technology at Anna University.

During my internship with Dover’s Data & Analytics team, I worked on a project that’s not just about building dashboards — it’s about solving a real business challenge: managing and governing Power BI content across a large, distributed organization.”

“My role focused on backend development and visualization:





- I retrieved and cleaned metadata from the Power BI REST API
- Built visualizations to show usage patterns, dataset freshness, and user activity
- Implemented Row-Level Security to restrict access by OpCo
- Replicated Power BI visuals using Python to maintain consistency

The goal was to make governance insights not only accurate — but also easy to understand and act on

Slide 2: What Is Data Governance?

“Before we dive into the app, let’s talk about what data governance actually means.

Data governance is the process of ensuring that data is:

-  Accurate and consistent
-  Secure and accessible only to the right people
-  Properly owned and maintained
-  Optimized for performance and efficiency

In a large company like Dover, where Power BI is used across many teams and OpCos, governance is essential to avoid:

- Outdated or duplicate reports
- Unused datasets

- Uncontrolled access
- Performance issues and clutter

So governance isn't just about control — it's also about **optimization.**"

Slide 3: Why We Built This App

"Our goal was to build a centralized, self-service web app that helps Dover:

- Monitor usage across Power BI workspaces
- Identify outdated or inactive content
- Enforce secure access using Row-Level Security
- Optimize the environment by reducing clutter and improving performance

In short: **This app helps us centralize the data governance process to keep our Power BI environment clean, secure, and optimized.**"

Week 1: Accessed Shared Power BI Workspaces

"I started by exploring shared Power BI workspaces using a Microsoft Learn access token. This helped me understand how workspaces are structured and what kind of metadata we could access — like reports, dashboards, datasets, and user roles."

Week 2: Connected to Power BI REST APIs

"Next, I connected to the Power BI REST APIs to pull real metadata. I was able to retrieve reports, dashboards, datasets, users, and refresh logs — which became the foundation for all the analysis we do in the app."

Week 3: Built the Streamlit Web App

"Once I had the data, I started building the Streamlit app. I designed a multi-page layout with clean navigation so users could easily explore different governance metrics — like reports, datasets, users, and activity trends."

Week 4: Implemented Row-Level Security (RLS)

"To make sure access was secure, I implemented Row-Level Security. This means users only see data relevant to their OpCo — which is a key part of governance and compliance."

Week 5: Recreated Visuals Using Python

“I then recreated key Power BI visuals using Python libraries like Plotly and Matplotlib. This allowed us to customize the visuals and make them interactive inside the Streamlit app.”

Week 6: Classified Active vs. Inactive Assets

“Finally, I wrote logic to classify reports and datasets as active or inactive — based on refresh history and usage logs. This helps teams identify outdated or unused content and clean up the environment.”