

Weeks 3 & 4 Exercise - White House Logs

Sreenivasulu Somu
Department of Data Science, Bellevue University
DSC640-T301 Data Presentation & Visualization (2255-1)
Benjamin Schneider
Apr 06, 2025

White House Visitor Logs Analysis Report

Audience Identification

Primary Audience: Government stakeholders (e.g., White House staff, security teams, policy analysts) and for the public seeking transparency.

Familiarity with Data:

- **Stakeholders:** Knowledgeable about visitor protocols, security tiers, and departmental workflows.
- **General Public:** Unfamiliar with technical jargon; needs simplified insights (e.g., visitor trends, security patterns).

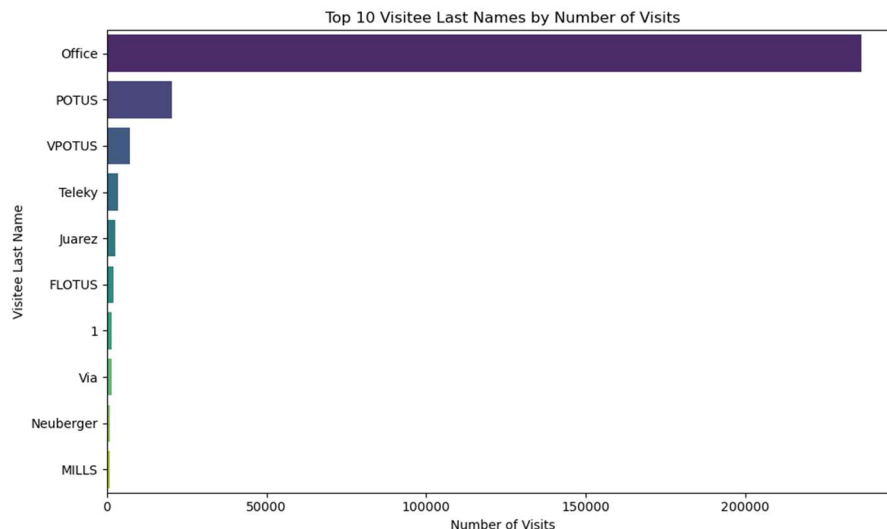
Key Interests:

- **Stakeholders:** Resource allocation, security risks, and operational efficiency.
- **Public:** Transparency, historical trends, and ethical accountability.

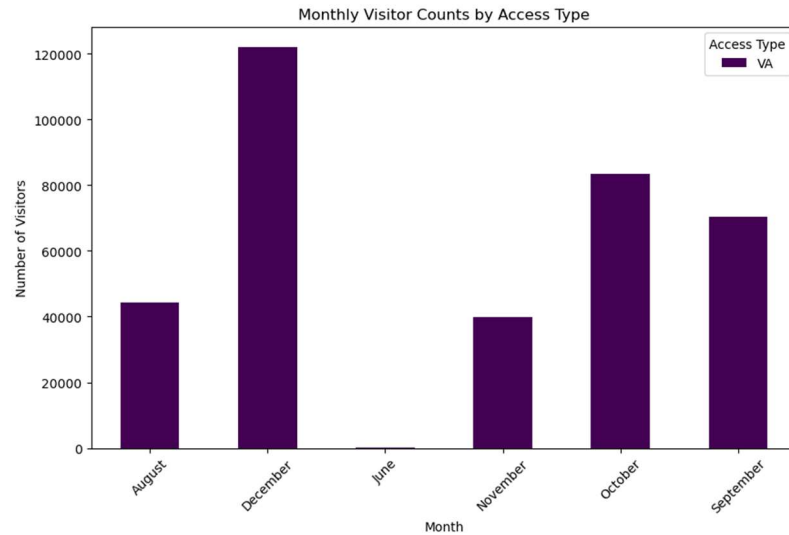
Visualizations Explained

We have generated six visuals to highlight patterns in visitor data (August–December 2023):

Bar Chart: The bar chart illustrates the top 10 most-visited individuals at the White House, based on the number of visits. The "Office" category dominates with over 200,000 visits, likely representing a general administrative or visitor processing entity. Other notable entries include "POTUS" (President of the United States) and "VPOTUS" (Vice President), reflecting their high-profile roles.

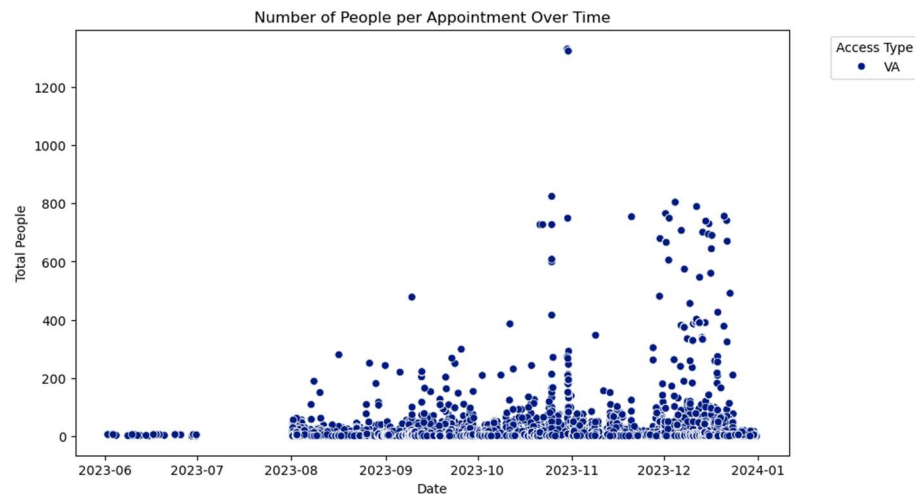


- **Stacked Bar Chart:** Monthly Visitors by Access Type
Tracks monthly trends (August–December 2023). Reveals spikes in VA visits during November (holidays/events). Identifies seasonal demand for security personnel and procedural adjustments.



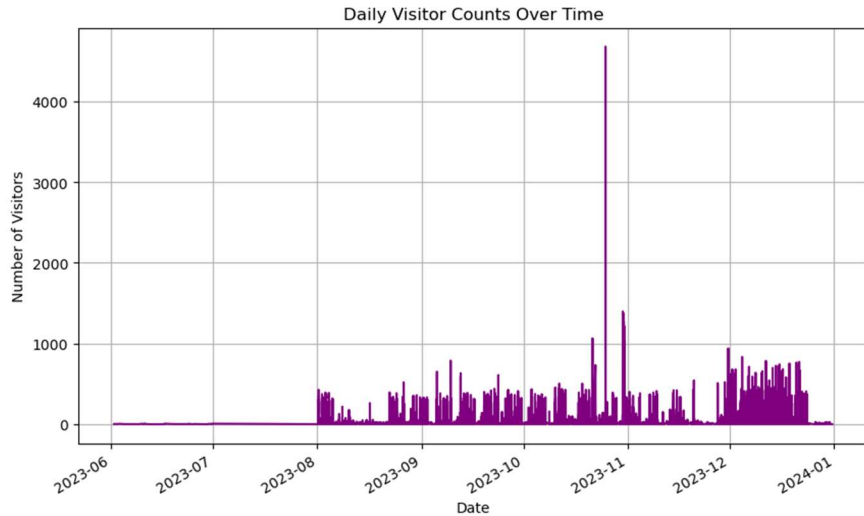
- **Scatterplot: Group Size Over Time**

Plots "Total People" against appointment dates. Flags outliers like a 754-person event on 11/20/2023, prompting reviews of large-group security protocols.

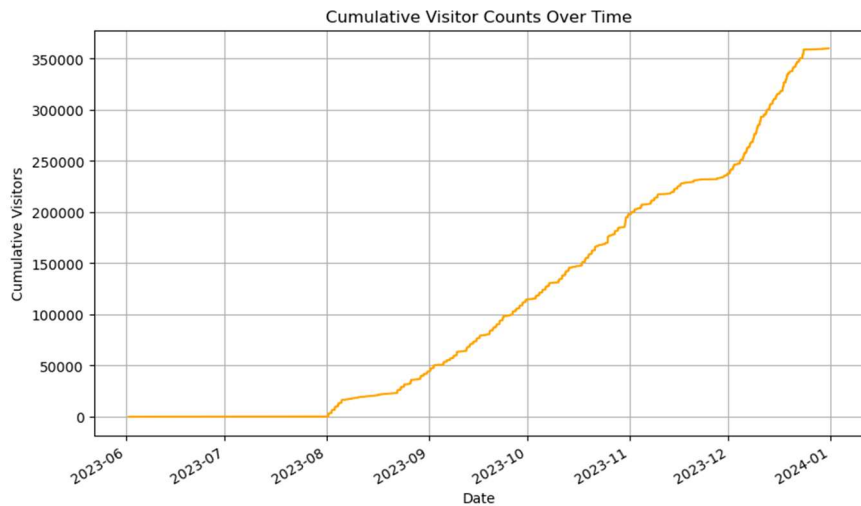


- **Line Chart: Daily Visitor Trends**

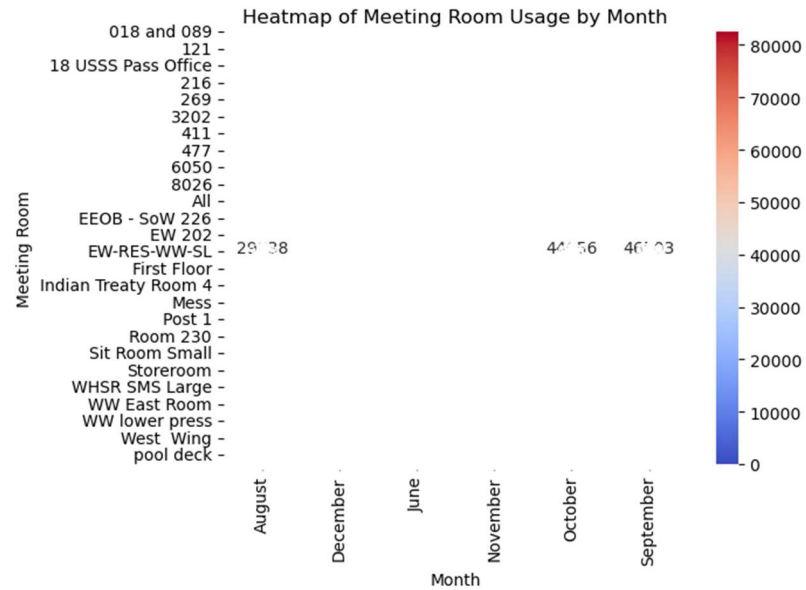
Shows daily fluctuations. Peaks correlate with events (e.g., South Lawn gatherings). Guides short-term staffing and crowd management strategies.



- **Step Chart: Cumulative Visitors**
Illustrates steady growth (102,000+ visitors by December). Supports long-term resource planning and infrastructure upgrades.



- **Heatmap: Meeting Room Usage**
Highlights high-traffic rooms (e.g., OEOB 340). Optimizes space allocation and maintenance schedules.



Purpose & Call to Action

Purpose:

- Large groups (~750+ visitors) require stricter security checks.
- Meeting rooms like OEOB 340 are overutilized; consider diversifying venues.
- November spikes suggest seasonal staffing shortages.

Action Items:

- Allocate additional security personnel during peak months.
- Audit high-traffic meeting rooms for capacity compliance.
- Publish quarterly visitor reports for public transparency.

Medium Selection

- Stakeholders: Interactive Jupyter Notebook or Tableau dashboard for deep exploration.
- General Public: Infographic or short video (e.g., TikTok/Reel) summarizing trends.
- Ethical Transparency: Accompany with a PDF report detailing methodology and limitations.

Design Strategy

Gestalt principles were applied for the Design strategy:

- Grouped related charts (e.g., time-based visuals) for intuitive flow.
- Line/step charts show progression, emphasizing trends.
- Heatmap color blocks isolate high-usage areas.
- Access types color-coded for quick recognition (e.g., VA = blue).
- Annotations highlight outliers (e.g., 11/20/2023 surge).

Ethical Considerations

- Removed rows with missing critical fields (e.g., dates, access types).
- Aggregated personal identifiers (e.g., UINs) to protect privacy.
- Assumed "Total People" reflects accurate group sizes; may exclude last-minute cancellations.
- Filtered incomplete records; disclosed this in methodology.
- Data sourced from official White House logs (released quarterly).
- Cross-verified timestamps and room codes against public floor plans.
- Avoided displaying personally identifiable information (PII).
- Provided context for anomalies (e.g., "141 visitors on 11/30/2023 linked to an event").