**🎯 Goal of the Dashboard:**

Let users understand *when*, *how much*, and *why* people go to the Toronto Islands — and how **weather** plays into it.

**🧭 Suggested Dashboard Layout**

**🧱 Layout Structure:**

Use **tabs or sections** for each major theme so it's not overwhelming at once. Here’s a clean structure:

**🔹 1. Overview / Highlights**

Let’s start with the “wow”:

* 📈 **Total redemptions per year** (bar chart)
* 📅 **Top 10 days** (bar chart or table with hover info)
* 🏆 **Top month overall** (big number or donut chart)
* 🌦️ **Redemptions vs Temperature bell curve** (scatter with trendline or histogram)
* 📍 Optional: Map pulse or animated dot

👉 Keep it compact but visual.

**🔹 2. Time Trends**

Answer: *When do people go to the island?*

Split into tabs or collapsible cards:

* 📆 **Daily average over the year** (366-day axis, maybe smoothed line)
* 📆 **Monthly average** (12-month bar or line)
* 📆 **Yearly totals over time** (line chart or stacked if you want to add weekday/weekend)
* ⏰ **Hourly average (24-hr or radial)** – great as a standalone plot

Add filters:

* Select year(s)
* Choose weekdays/weekends
* Maybe even weather filters

**🔹 3. Drilldowns**

Let users explore interactively:

* 📆 Drill into any day/week/month/year
* ⏱️ Zoomable timeline of redemption counts (Plotly makes this easy)
* Use dropdowns or click actions to filter the rest of the dashboard

Could be a secondary tab or collapsible “Explore” section

**🔹 4. Weather Insights**

This is where the "why" comes in.

* 🌡️ **Temperature vs Redemption Count (Bell curve or scatter plot)**
* 🌦️ **Line chart with weather overlay**: daily redemptions + temperature
* 💧 Optional: rainfall, cloud cover, wind as colored layers or tooltips

Let users filter by:

* Weather ranges (e.g., only sunny days)
* Day type (weekday/weekend/holiday)

**🔹 5. Bonus (If you want to go deeper)**

* 🎉 Annotated events that spike usage (e.g. long weekends)
* 🌊 Tide/water level (if applicable or available)
* 🧑 Demographic or behavioral data (if you ever get survey data)

**🧰 Tool Recommendations (for building it)**

If you're staying in Python:

* **Plotly Dash** – interactive web-based dashboards
* **Streamlit** – quicker and more design-friendly for solo analysts
* **Voila + Jupyter** – turns your notebook into a dashboard
* Optional: export graphs from Plotly to embed in a Power BI or Tableau dashboard