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Project Proposal

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❖ Problem

One of the common problems in the world is the need for blood donors to help the sick and injured in sudden accidents. Many hospitals rely on obtaining blood from volunteer donors, so the absence of some rare types is a possibility. One of the problems faced by those wishing to donate blood is the difficulty of accessing centers and hospitals and don't have sufficient time. Thus, the idea of distributing special carts for donation in metro stations was put forward at several times, taking advantage of the most crowded stations with people to reach the largest number of donors and thus help many patients to improve.

❖ Question
- What is the best time to donate blood and the possibility of reaching the largest number?
- What are the most important and containment stations for people?
- Will many patients in need of blood be helped?
- Will the Ministry of Health and hospitals benefit from this service?
- Will donors gain time instead of going to specialized centers to donate blood?
- Will the service remind people and spread awareness of the benefit of donating to the human body and helping others as well?
- Will we take advantage of the crowding?

❖ Data description

- **C/A:** Control Area.
- **UNIT:** Remote Unit for a station.
- **SCP:** Subunit Channel Position represents a specific address for a device.
- **STATION:** Represents the station name the device is located at.
- **LINENAME:** Represents all train lines that can be boarded at this station Normally lines are represented by one character.
- **DIVISION:** Represents the Line originally the station belonged to BMT, IRT, or IND.
- **DATE:** Represents the date (MM-DD-YY).
- **TIME:** Represents the time (hh:mm:ss) for a scheduled audit event
- **DESc:** Represent the "REGULAR" scheduled audit event (Normally occurs every 4 hours).
- **ENTRIES:** The cumulative entry register value for a device.
- **EXIST:** The cumulative exit register value for a device.

❖ Tools

- Pandas with python language for clean and explore data.
- Matplotlib library for data visualization.