Technocolabs **Raushan Kumar**

Mini Project 1- Dr. Semmelweis and the Discovery of Handwashing

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Overview

In 1847, the Hungarian physician Ignaz Semmelweis makes a break through discovery as he discovered handwashing. Contaminated hands were a major cause of childbed fever and by enforcing handwashing at his hospital he saved hundreds of lives. Data regarding the no. of deaths and births at two clinics were collected before and after the introduction of handwashing by the doctor.

This is python data science project that deals with the data collected by the doctor.

Tools & Technologies

Python Pandas Library Jupyter Notebook

Tasks

- Meet Dr. Ignaz Semmelweis
- The alarming number of deaths
- Death at the clinics
- The handwashing begins
- The effect of handwashing
- The effect of handwashing highlighted
- More handwashing, fewer deaths?
- A Bootstrap analysis of Semmelweis hand washing data
- The fate of Dr. Semmelweis

Goals Achieved

- In this python project we re-analysed the medical data Dr. Semmelweis collected.
- Used the data science tools to manipulate and visualize the data collected.
- Gained insights about the impact of handwashing of death proportion of children.

Outcome

It was observed that after the start of handwashing the death proportion mean has reduced by 0.075 and it aligns with the 95% confidence interval of the data. So, we reached to the conclusion that handwashing has truly caused an impact on children death proportion. Hence, the doctors should wash hands in order to save more children.