

# UNIVERSITI KUALA LUMPUR

# MALAYSIAN INSTITUTE OF INFORMATION TECHNOLOGY

| Name of Course  | DATA VISUALIZATION        |
|-----------------|---------------------------|
| Course Code     | IIB 40103                 |
| Lecturer        | TS. DIYANA BINTI AB KADIR |
| Semester / Year | MARCH 2024                |

| Assessment | ANALYSIS REPORT                         |
|------------|---|
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# IIB 40103 DATA VISUALIZATION Analysis report rubric

# Report title: <u>FATALITIES IN THE ISRAELI-PALESTINIAN CONFLICT</u> Student 1 Name: <u>MUHAMMAD HAZIQ BIN ROZMAN (52224121174)</u>

|        | CRITERIA   | WEIGH<br>TAGE | Outstanding | Meet expectation | Can be<br>improved | Minimal effort | TOTAL MARKS |  |
|--------|--|---------------|-------------|------------------|--------------------|----------------|-------------|--|
| N<br>O |  |               | 4           | 3                | 2                  | 1              |             |  |
| 1      | Introduction Clarity on the dataset introduction                     | 2             |             |                  |                    |                |             |  |
| 2      | Research question Clarity on the research questions                  | 2             |             |                  |                    |                |             |  |
| 3      | Findings Findings answered the research questions                    | 2             |             |                  |                    |                |             |  |
| 4      | Dashboard interactivity Ability to produce interactive dashboard     | 2             |             |                  |                    |                |             |  |
| 5      | Conclusion  The recommendation given has potential to be implemented | 2             |             |                  |                    |                |             |  |
|        | TOTAL ( 40 MARKS)  |               |             |                  |                    |                |             |  |

#### 1. ANALYSIS REPORT:

FATALITIES IN THE ISRAELI-PALESTINIAN CONFLICT.

### 2. INTRODUCTION

This analysis report focuses on the dataset titled "Fatalities in the Israeli-Palestinian Conflict." It documents incidents resulting in deaths within this ongoing conflict. The dataset, compiled by data expert Willian Oliveira Gibin, is freely available under the CC0 license, meaning it's in the public domain for unrestricted use.

Containing entries spanning a significant timeframe, from 2000 to 2023, the dataset provides details such as the date, location, demographics of the deceased, and circumstances surrounding their deaths. It offers insights into the individuals affected by the conflict, their affiliations, and the nature of the violence they faced.

The dataset serves as a crucial resource for researchers, policymakers, and analysts interested in understanding the human toll of the Israeli-Palestinian conflict. It's used in various publications to contribute to academic research and public discourse on the subject. Through careful examination, insights can be gained that may contribute to a deeper understanding of the conflict and potentially inform efforts towards reconciliation and resolution.

### 3. RESEARCH QUESTIONS

### 3.1 Trends in Fatalities

Objective: Identify patterns and trends over time regarding fatalities in the Israeli-Palestinian conflict.

### Questions:

- How has the number of fatalities changed over different years?
- Are there particular periods with significant increases or decreases in fatalities?
- Which sides are affected the most?

# 3.2 Demographic Analysis of Fatalities

Objective: Understand the demographic profiles of individuals who have died in the conflict.

## Questions:

- What are the age and gender distributions of the fatalities?
- How do these distributions vary between Palestinians and Israelis?
- Are certain demographic groups more affected than others?

# 3.3 Geographical Distribution of Fatalities

Objective: Map and analyze the geographical locations where fatalities occur.

# Questions:

- Which regions and districts experience the highest number of fatalities?
- Are there specific locations that frequently experience violence?

## 3.4 Circumstances Surrounding Fatalities

Objective: Examine the circumstances under which fatalities occur.

## Questions:

- How many fatalities involved individuals who took part in hostilities versus those who did not?
- How many fatalities are caused by the military forces compared to civilians?

### 3.5 Comparative Analysis of Fatalities by Type of Ammunition:

Objective: Explore the relationship between the location of fatal events and the type of ammunition.

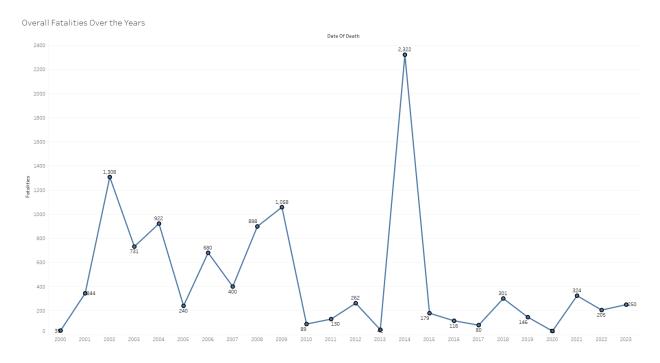
### Question:

- What types of ammunition are most commonly associated with fatalities?
- Are there specific locations where a specific type of ammunition is used?

### 4. FINDINGS ELABORATION

### 4.1 Trends in Fatalities in the Israeli-Palestinian Conflict

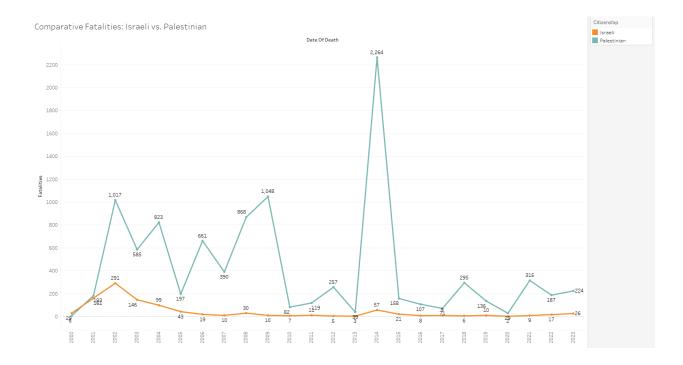
#### 4.1.1 Overall Fatalities Over the Years



This line chart provides a clear view of the annual fatalities, highlighting significant peaks and trends.

- The visualization shows the annual total number of fatalities from 2000 to 2023.
- The highest number of fatalities occurred in 2014, with a total of 2,322 deaths.
- Significant increases are seen in years like 2002, 2004, 2006, 2008, 2009, and 2014.
- There are notable decreases after peak years, indicating periods of relative calm or ceasefires.

# 4.1.2 Comparative Fatalities: Israeli vs. Palestinian



A two-line chart compares the fatalities of Palestinians and Israelis each year, highlighting the major differences between the two groups.

- The visualization breaks down the annual fatalities into Palestinian(green) and Israeli(orange) casualties.
- Palestinians are disproportionately affected, with significantly higher fatalities in all years.
- In 2014, out of 2,322 total fatalities, 2,264 were Palestinian, and only 57 were Israeli.
- Even in years with fewer total fatalities, Palestinian casualties remain consistently higher.

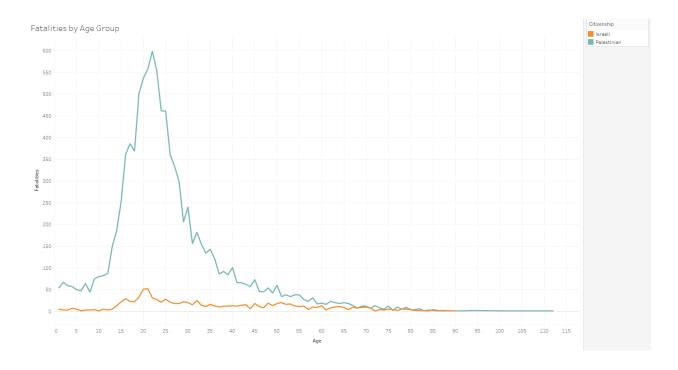
## 4.1.3 Additional Insights:

 Patterns of Conflict: The data indicates periods of intense conflict and violence, such as during the Second Intifada (2000-2005) and the 2014 Gaza War.

- Recent Trends: In recent years, the total number of fatalities has decreased compared to the peak years, but Palestinians continue to face higher casualties.
- Disproportionate Impact: The conflict has a massive impact on Palestinians, resulting in consistently higher fatality numbers.

## 4.2 Demographic Analysis of Fatalities in the Israeli-Palestinian Conflict

# 4.2.1 Fatalities by Age Group

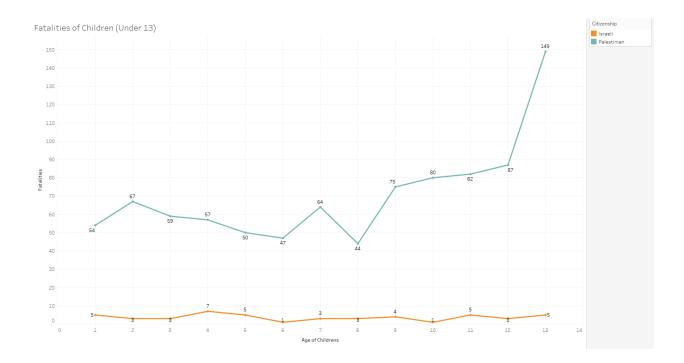


This line chart compares the age distribution of fatalities for both populations, highlighting trends and differences in casualty rates.

- Many Palestinian fatalities occur between the ages of 12 and 45, with the highest fatalities at age 22, resulting in approximately 600.
- The Palestinians suffer higher casualties among younger individuals, teens to adults.

• The Israeli fatalities consistence across different age groups.

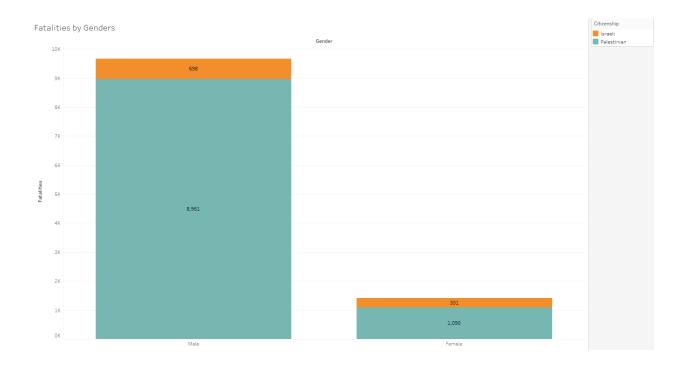
# 4.2.2 Fatalities of Children (Under 13)



The line chart displays the number of fatalities for children under 13, comparing Palestinian and Israeli casualties.

- Palestinian children suffer significantly higher casualties compared to Israeli children across all age groups under 13.
- For example, Palestinian children aged 13 have 149 fatalities, while Israeli children in the same age group have only 5 fatalities.

### 4.2.3 Fatalities by Genders



The bar chart showcases the distribution of fatalities by gender for Palestinians and Israelis.

- Palestinian males account for the majority of fatalities, with approximately 8,691 deaths,
   followed by Palestinian females with 1,090 deaths.
- Similarly, Israeli males experience higher casualties compared to females, with approximately
   698 fatalities for males and 331 fatalities for females.

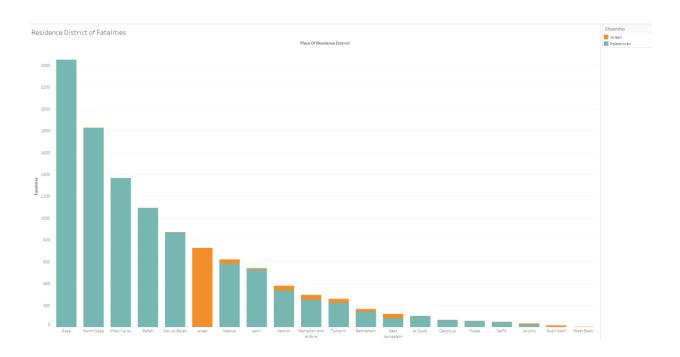
# 4.2.4 Additional Insights

- Age Distribution: The data highlights the vulnerability of the Palestinians' children in the conflict,
- Gender Disparity: Most fatalities are males for both sides, reflecting potential differences in roles and exposure to violence.

Impact on Palestinian Population: Palestinian demographics, particularly children and males,
 are disproportionately affected by the conflict compared to Israelis.

### 4.3 Geographical Analysis of Fatalities in the Israeli-Palestinian Conflict

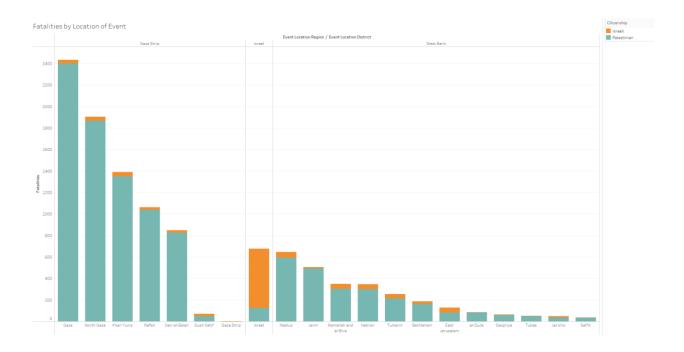
### 4.3.1 Residence District of Fatalities



The bar chart illustrates the number of fatalities by residence district, comparing Palestinian and Israeli casualties.

- In the Gaza Strip region, districts like Gaza, North Gaza, and Rafah report the highest number of fatalities among Palestinians.
- In the West Bank region, Nablus, Jenin, and Hebron have higher Palestinian fatalities, while districts like Ramallah al-Bira and Tulkarm also show significant casualties.
- Israeli fatalities are spread across various regions, with higher numbers in districts like Nablus,
   Hebron, and Ramallah al-Bira.

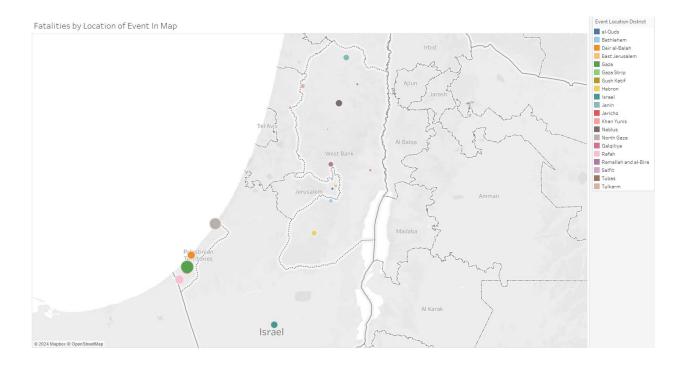
# 4.3.2 Fatalities by Location of Event



The bar chart displays the number of fatalities by the location of the event, comparing Palestinian and Israeli casualties.

- In the Gaza Strip region, locations like Gaza, North Gaza, and Khan Yunis report the highest number of fatalities among Palestinians.
- In the West Bank region, locations like Nablus, Jenin, and Ramallah al-Bira report higher Palestinian fatalities, while East Jerusalem also shows significant casualties.

# 4.3.3 Fatalities by Location of Event In Map



The map visually represents the geographical distribution of fatalities across different locations.

- Hotspots of violence are evident in areas like the Gaza Strip, particularly in districts like Gaza,
   North Gaza, and Khan Yunis.
- In the West Bank, regions like Nablus, Jenin, and Hebron also witness significant casualties, indicating recurring violence in these areas.

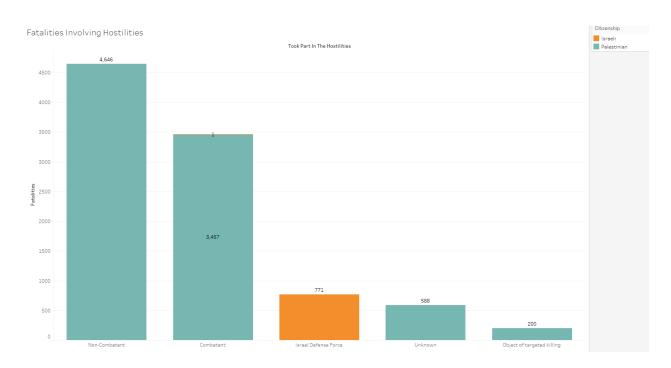
# 4.3.4 Additional Insights

Regional Disparities: The Gaza Strip experiences higher casualties compared to other regions,
 indicating the intensity of conflict in that area.

- Urban Centers: Urban Centers: Cities like Gaza City and Nablus are major areas of violence, showing the complex nature of urban warfare in the conflict.
- Border Regions: Areas near the Israeli borders, such as Rafah and Deir al-Balah, experience more violence, likely due to their proximity to Israeli military bases and border crossings.

## 4.4 Analysis of Fatalities: Hostilities and Perpetrators

### 4.4.1 Fatalities Involving Hostilities

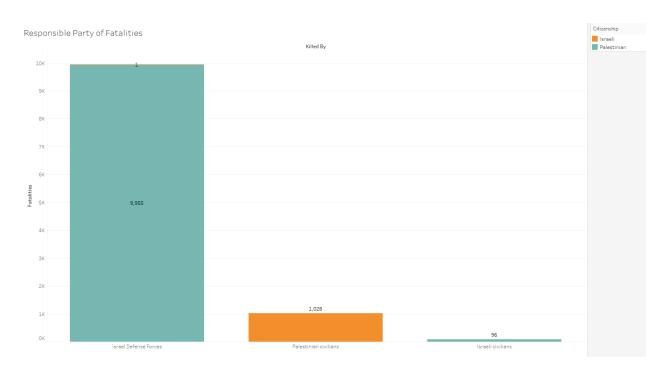


This bar chart compares the number of fatalities involving individuals who took part in hostilities against those who did not, distinguishing between Palestinian and Israeli casualties.

- A total of 4646 Palestinian fatalities were non-combatants, with no Israeli non-combatants recorded in the data.
- 3457 Palestinian combatants were killed compared to 1 Israeli combatant.

- There were 771 Israeli fatalities categorized under Israeli Defense Forces.
- 588 Palestinian fatalities had an unknown status.
- 200 Palestinian fatalities were specifically targeted.

# 4.4.2 Responsible Party of Fatalities



This bar chart illustrates the responsible parties for fatalities, comparing Palestinian and Israeli casualties.

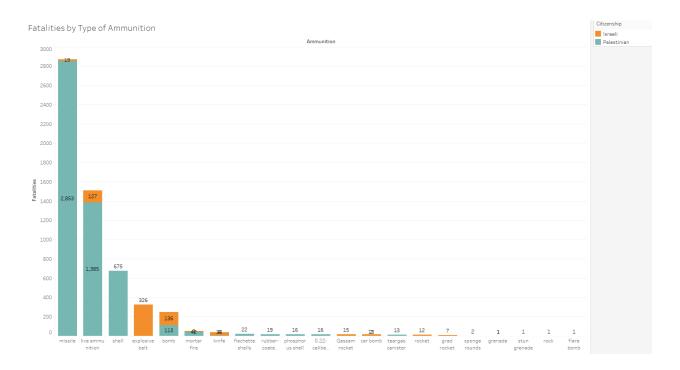
- The IDF was responsible for 9955 Palestinian fatalities and 1 of its own Israeli.
- Palestinian civilians were responsible for 1028 Israeli fatalities.
- Israeli civilians were responsible for 96 Palestinian fatalities.

## 4.4.3 Additional Insights

- A significant number of Palestinian fatalities (4646) were non-combatants, highlighting the impact of the conflict on civilians.
- The Israel Defense Force is a major party responsible for fatalities.
- There is no military on the sides of Palestine, showing that the Israel Defense Force only fighting a war with Palestinian civilians, some of whom are labelled 'combatants' simply because they defend themselves.

# 4.5 Analysis of Fatalities by Type of Ammunition

## 4.5.1 Fatalities by Type of Ammunition



This bar chart compares the types of ammunition associated with fatalities, distinguishing between Palestinian and Israeli casualties.

- Missiles are the deadliest type of ammunition, causing the highest number of Palestinian fatalities (2853) and also resulting in 19 Israeli fatalities. This indicates a heavy use of missiles in conflict areas, especially affecting Palestinian regions.
- Live Ammunition is the second most common cause of fatalities, with 1385 Palestinian and
   127 Israeli casualties. The significant number of Israeli casualties suggests that live
   ammunition is frequently used in confrontations involving Israeli forces.
- Explosive Belts are exclusively responsible for Israeli casualties (326), indicating targeted attacks within Israeli territories.
- Bombs also show a high impact on both sides, with 113 Palestinian and 136 Israeli fatalities, reflecting the use of bombs in densely populated or strategically important areas.
- Other ammunition types like shells, mortar fire, and knives primarily affect Palestinians,
   suggesting different tactics or phases in the conflict.

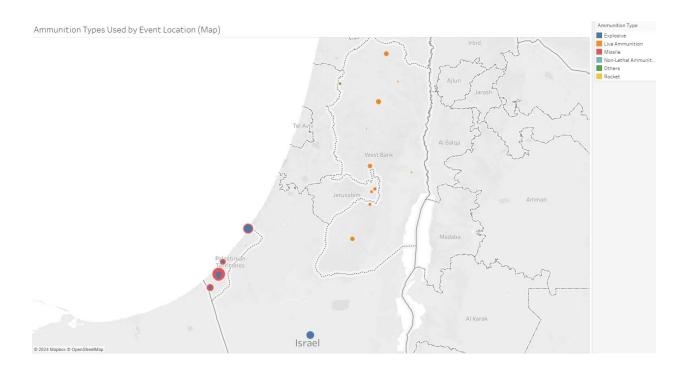
### 4.5.2 Ammunition Types Used by Event Location



This text table details the types of ammunition used across different regions.

- Gaza Strip: The region suffers heavily from missiles and live ammunition, with Gaza and North
  Gaza being the most affected areas. This highlights the Gaza Strip as a primary conflict zone
  with extensive military operations and frequent attacks.
- Israel: While experiencing fewer fatalities overall, Israel is significantly impacted by explosive belts and bombs. These attacks are likely carried out by militants targeting civilian areas.
- West Bank: Nablus, Jenin, and Hebron are hotspots for live ammunition use, indicating
  frequent ground clashes and operations in these districts. Missiles and bombs also contribute
  to fatalities, reflecting diverse attack strategies.

# 4.5.3 Ammunition Types Used by Event Location (Map)



This map visualization illustrates the distribution of different types of ammunition used across various regions, highlighting areas with high fatalities and specific ammunition types.

- The map visualization shows clear geographical patterns in ammunition use. Missiles are
  concentrated in the Gaza Strip, explosive belts in Israel, and live ammunition across multiple
  regions, particularly in the West Bank.
- The visualization emphasizes the intensity of conflict in specific areas like Gaza City, North Gaza, and Khan Yunis, which face the brunt of missile attacks. In contrast, Israeli regions experience sporadic but deadly explosive attacks.

# 4.5.4 Additional Insights

- Regional Impact: The Gaza Strip and the West Bank are the most affected regions, with Gaza
  facing frequent missile strikes and the West Bank experiencing high use of live ammunition
  and bombs. Israeli regions, while less frequently attacked, suffer significant casualties from
  explosive belts and bombs.
- Type of Ammunition: Missiles and live ammunition are the most common and deadly types, heavily affecting Palestinian areas. Explosive belts and bombs are primarily used in attacks on Israeli territories.

#### **5. Conclusion**

The analysis of fatalities in the Israeli-Palestinian conflict provides critical insights into the destructive impact of prolonged violence on the region's population. This conflict, which has persisted for decades, continues to claim the lives of many innocent civilians, including numerous

young adults and children of Palestinians. The findings highlight a significant difference in casualties, with Palestinian communities suffering the most from the violence.

The data emphasizes the unequal nature of the conflict, characterized by a significant power imbalance between the well-equipped Israeli Defense Forces (IDF) and Palestinian civilians. The use of military force against civilian populations, particularly in densely populated areas like Gaza, raises serious ethical and humanitarian concerns. The indiscriminate bombing campaigns targeting civilian infrastructure in Gaza worsen the suffering of innocent civilians and contribute to the loss of countless lives.

### 5.1 Recommendation

- Immediate Ceasefire: Urgent diplomatic actions are necessary to establish a ceasefire and stop the ongoing violence. Both parties must agree to reduce tensions and abstain from further military activities.
- International Mediation: The global community, including the United Nations and regional organizations, should increase diplomatic attempts for peace agreements. Mediators need to involve all parties concerned to tackle the underlying issues of the conflict and negotiate a complete settlement.

- Humanitarian Assistance: Humanitarian aid organizations should have unrestricted access
  to deliver vital assistance to affected communities, including food, water, medical supplies,
  and shelter. Priority should be given to easing the suffering of vulnerable populations, such
  as children, women, and the elderly.
- Accountability and Justice: Those responsible for human rights abuses and violations of
  international law must face consequences for their actions. Transparent investigations into
  alleged war crimes and human rights violations should take place, and perpetrators should
  be prosecuted through fair and impartial legal proceedings.

# **5.2 Benefits to Organizations**

- Informed Decision-Making: Provides valuable insights for policy decisions and resource allocation.
- Strategic Planning: Helps in developing targeted interventions and strategic plans for conflict resolution and humanitarian assistance.
- Advocacy and Awareness: Raises awareness about the humanitarian crisis, mobilizes support for peace initiatives, and advocates for diplomatic solutions.

# 6. References

[1] Israeli–Palestinian conflict

https://en.wikipedia.org/wiki/Israeli%E2%80%93Palestinian\_conflict\

[2] Tableau Desktop Fundamentals Student Guide Workbook.