UNIVERSITY OF MANAGEMENT AND TECHNOLOGY

School of science and technology (SST)



PROJECT PROPOSAL:

CRIMINAL RECORD
MANAGEMENT SYSTEM

SUBMITTED TO:

SIR SHAHZAIB MUSHTAQ SHAH DATABASE LAB (V8)

SUBMITTED BY:

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CRIME RECORD MANAGEMENT SYSTEM

Entities

- 1. Criminal
 - details of criminals.
- 2. Crime
 - Represents crime incidents.
- 3. Victim
 - information about victims.
- 4. Police Officer
 - details of officers handling cases.
- 5. Investigation Report
 - details of case investigations.
- 6. Court Case
 - court proceedings related to crimes.
- 7. Witness
 - information about witnesses.
- 8. Evidence
 - physical or digital proof related to a crime.
- 9. Complaint/FIR
 - the initial report of a crime.
- 10. Suspect
 - details of individuals suspected of a crime.

Attributes Of Entities

1. Criminal

- i. Criminal ID
- ii. Name
- iii. Age
- iv. Gender
- v. Address
- vi. Criminal_History
- vii. Arrest_Status

2. Crime

- i. Crime ID
- ii. Crime_Type
- iii. Crime_Date
- iv. Crime_Location
- v. Crime_Description
- vi. Evidence_Collected
- vii. Victim_ID
- viii. Criminal_ID

3. Victim

- i. Victim_ID
- ii. Name
- iii. Age
- iv. Gender
- v. Contact_Number
- vi. Address
- vii. Injury_Status
- viii. Crime_ID
- ix. Statement

4. Police Officer

- i. Officer ID
- ii. Name
- iii. Rank

- iv. Badge_Number
- v. Contact_Number
- vi. PoliceStation
- vii. Assigned_Cases
- viii. Crime_ID

5. Investigation Report

- i. Report_ID
- ii. Crime ID
- iii. Officer_ID
- iv. Investigation_Details
- v. Findings
- vi. Report_Date
- vii. Case_Status

6. Court Case

- i. Case_ID
- ii. Crime_ID
- iii. Court_Name
- iv. Judge_Name
- v. Hearing_Date
- vi. Case_Status
- vii. Verdict

7. Witness

- i. Witness_ID
- ii. Name
- iii. Age
- iv. Gender
- v. Contact_Number
- vi. Address
- vii. Statement
- viii. Crime_ID

8. Evidence

- i. Evidence_ID
- ii. Crime_ID

- iii. Evidence_Type
- iv. Description
- v. Collected_By
- vi. Collection_Date
- vii. Storage_Location

G. Complaint/FIR

- i. Complainant
- ii. Crime_IDComplaint_Date
- iii. Description
- iv. Filed_By (Officer_ID)
- v. Status

10. Suspect

- i. Suspect_ID
- ii. Name
- iii. Age
- iv. Gender
- v. Address
- vi. Contact Number
- vii. Crime_ID
- viii. Status (Under Investigation, Arrested, Released)

Splits Into Type Of Attributes

1. Entity type attributes

- 1. Complainant
- 2. PoliceStation

2. Single-valued attributes

- 1. Criminal_ID
- 2. Crime_ID
- 3. Victim_ID

- 4. Officer_ID
- 5. Report_ID
- 6. Case_ID
- 7. Witness_ID
- 8. Evidence_ID
- 9. Complaint_ID
- 10. Suspect_ID
- 11. Name
- 12. Age
- 13. Gender
- 14. Address
- 15. Rank
- 16. Badge_Number
- 17. Contact Number
- 18. Hearing_Date
- 19. Court_Name
- 20. Judge_Name
- 21. Crime_Date
- 22. Crime_Location
- 23. Crime_Description
- 24. Investigation_Details
- 25. Findings
- 26. Report_Date
- 27. Case_Status
- 28. Verdict
- 29. Description
- 30. Filed_By (Officer_ID)
- 31. Status (Under Investigation, Arrested, Released)

3. Multi-valued attributes

Criminal_History

- 2. Evidence_Collected
- 3. Assigned_Cases
- 4. Contact_Number
- 5. Crime_Type

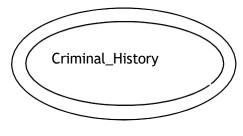
Representation Of Attributes By Symbols

Entity-type

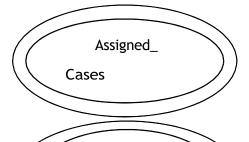
Complainant

PoliceStation

Multi-valued



Evidence_ Collected



Crime_Type

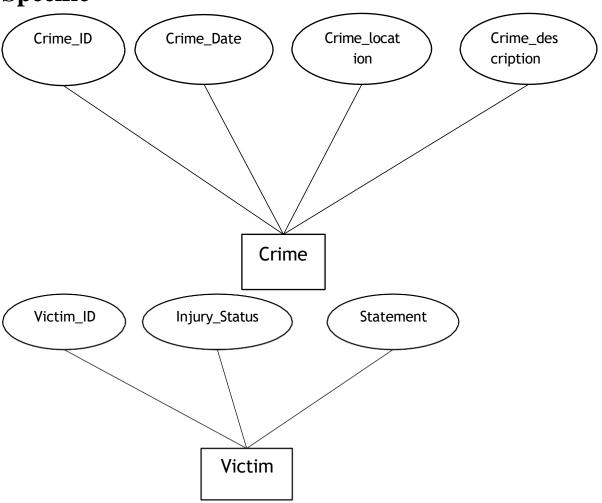
Contact_Number

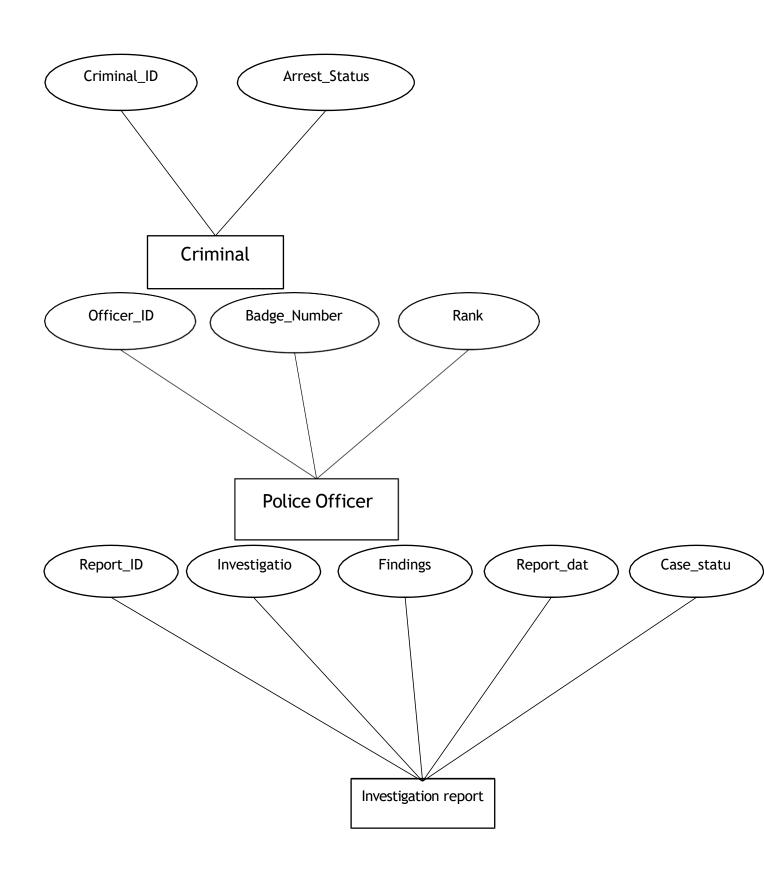
Single-valued

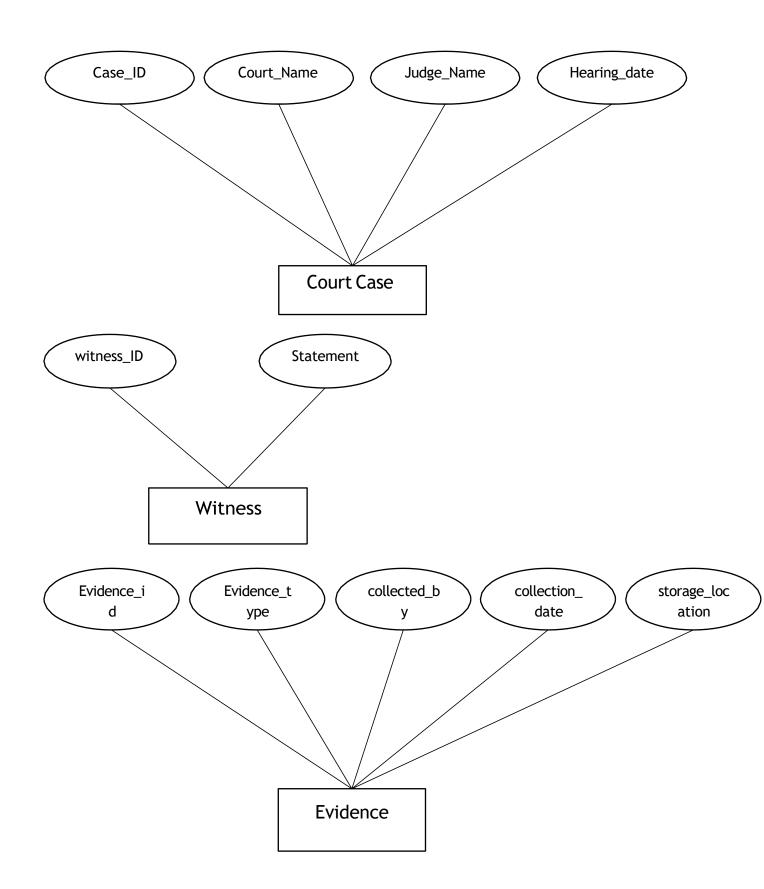
Generalized common attributes

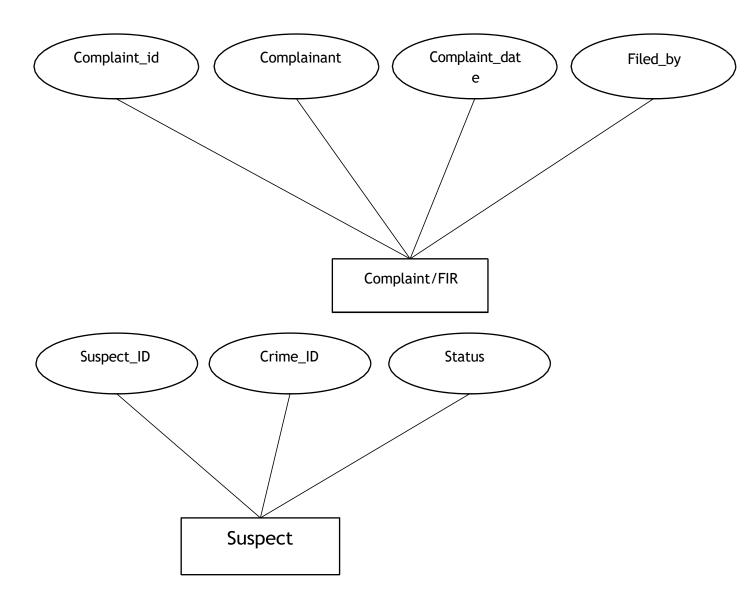


Specific

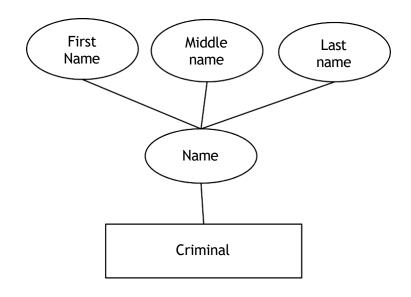


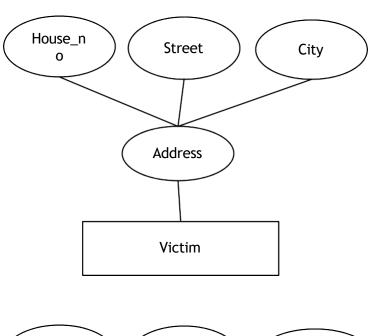


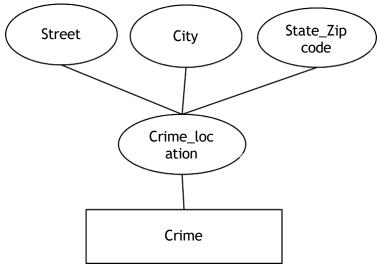


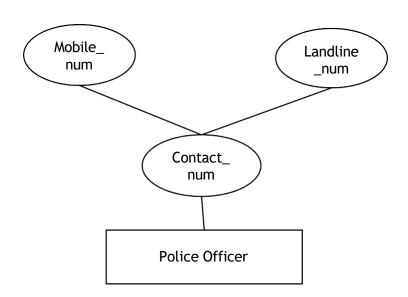


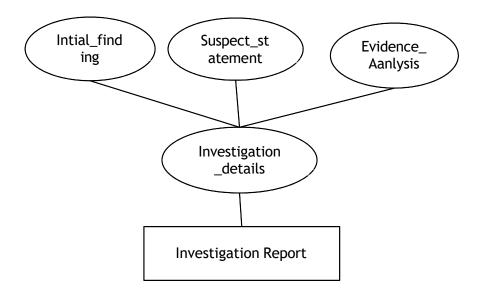
Composite Attributes



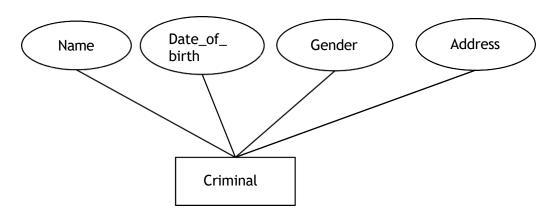


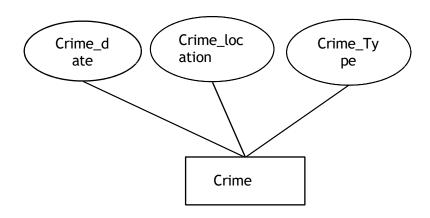


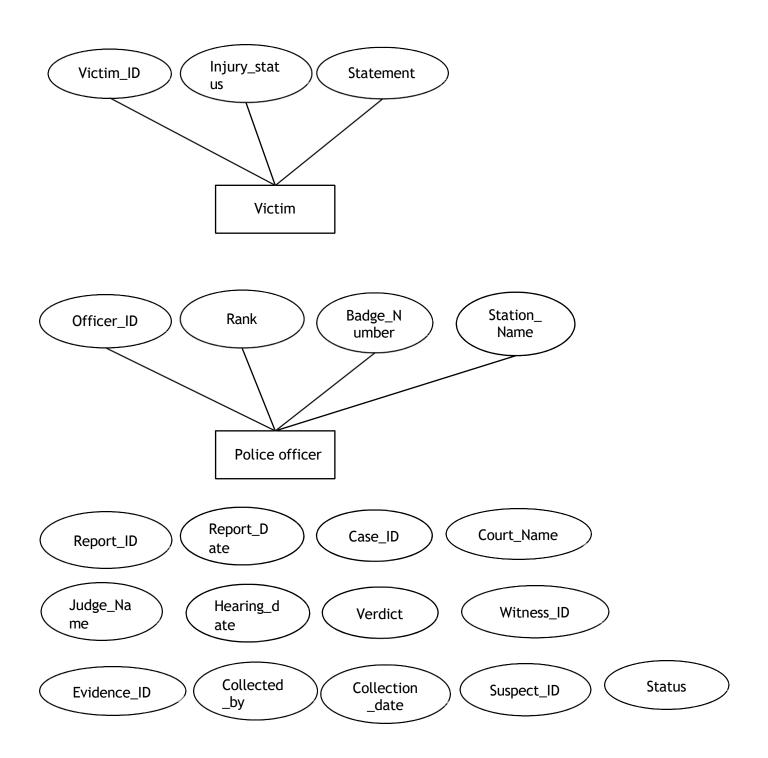




Stored Attributes







Derived Attributes

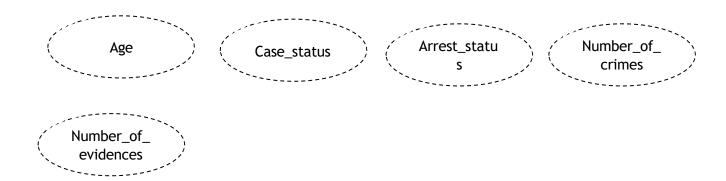
Age → Derived from Date_of_Birth

Case_Status → Derived from Investigation Report & Court Verdict

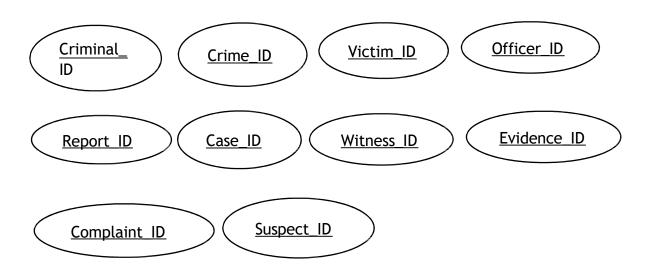
Arrest_Status → Derived from Crime & Investigation Report

Number_of_Crimes → Derived from Crime Records for a Criminal

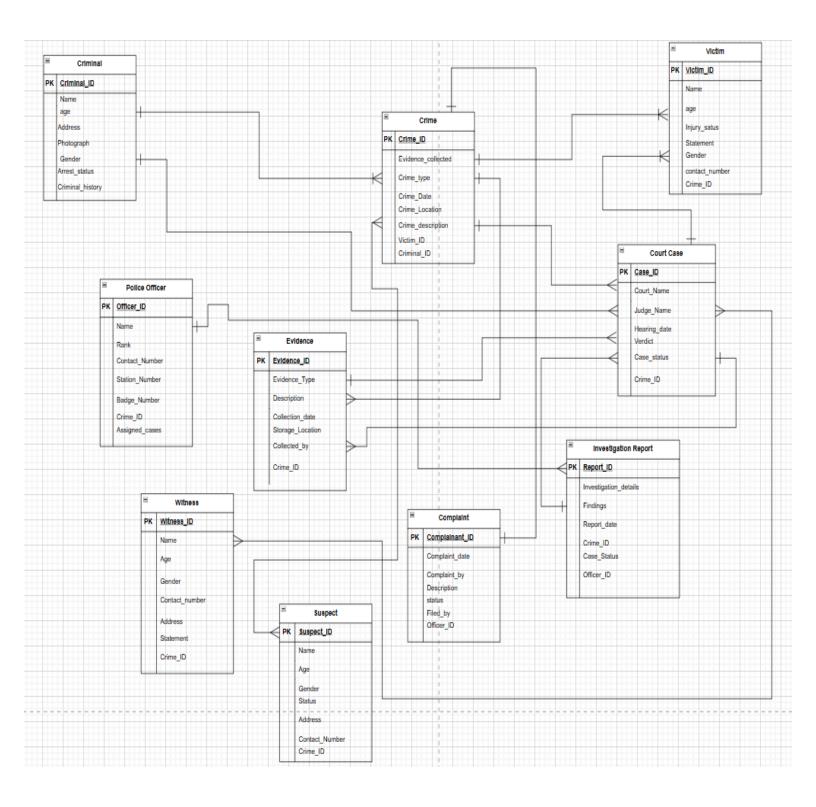
Number_of_Evidences → Derived from Crime_ID in Evidence Table



Key Attributes



CROW FOOT ERD



CHEN ERD

