DATA AND APPLICATIONS (CS4.301,MONSOON 2023)

PROJECT PHASE 2: ER DIAGRAM

Team 12

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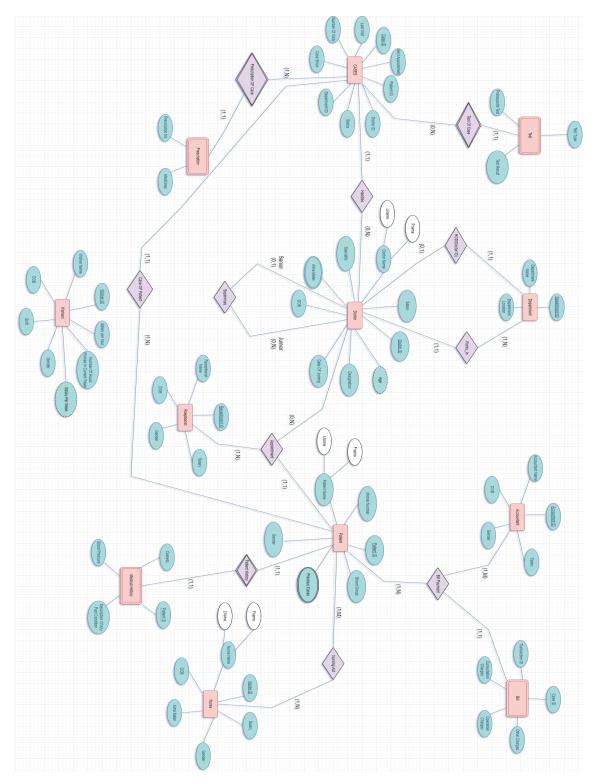Neel Amrutia (2022101117)
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November 2023

Contents

1 Entity Relationship Diagram

Link : ER Diagram

2 Modifications of the Requirements Document

2.1 Changes in Relationship Types

1. We have introduced three new Identifying relationship types. The three new relationships introduced are:-

   (a) **Test** REPORT OF **Case**

      i. Test is a Weak Entity Type whereas Case is a Strong Entity type.
      ii. Binary relationship between a Test Report and a Case.
      iii. Cardinality Ratio (N:1)
      iv. Min-Max:-
         - For Test, (1,1)
         - For Case, (0, N)

   (b) **Prescription** OF **Case**

      i. Prescription is a Weak Entity Type whereas Case is a Strong Entity type.
      ii. Binary relationship between a Prescription and a Case.
      iii. Cardinality Ratio (N:1)
      iv. Min-Max:-
         - For Prescription, (1,1)
         - For Case, (1, N) Assuming the Doctor gives at least one prescription for the case.

   (c) **Medical History** OF **Patient**

      i. Medical History is a Weak Entity Type whereas Patient is a Strong Entity Type.
      ii. Binary relationship between a Medical History and a Patient.
      iii. Cardinality Ratio (1:1)
      iv. Min-Max:-
         - For Medical History, (1,1)
         - For Patient, (1, 1)

2. We kept a Ternary relationship type of "Receptionist GIVES APPOINTMENT OF Doctor TO Patient" and a Binary relationship "Receptionist GIVES_APPOINTMENT Patient". This added to the redundancy of the Database, so we removed the Binary relationship.

2.2   Changes in Data Types of few attributes of entities

1. Initially we kept all the "Dates" as "Varchar", but as new concepts were taught in class, we thus changed the data type to "Date".

2. Age was kept as the derived quantity of "Varchar". Now, we changed it to "INT"