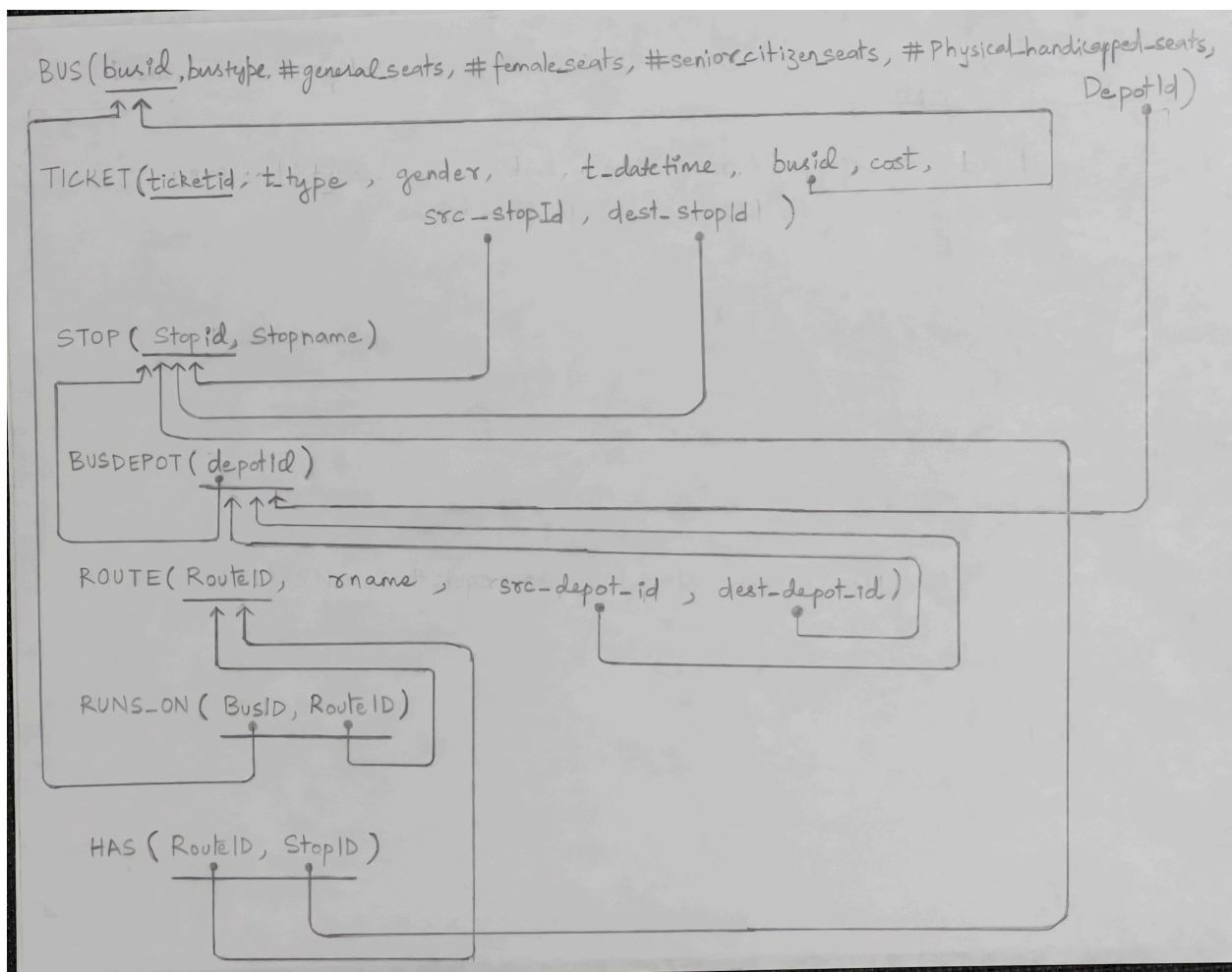


## Phase 3 - Mapping To Relations - Revised

### Mapped Relations

Primary keys in a relation are identified by underline and foreign keys are identified by a dot with referential arc pointing to primary key from other relation.



**BUS**

**Primary Key :** BusID

**Candidate Key :** BusID

**Functional Dependencies :**

BusID  $\rightarrow$  {bustype, #general\_seats, #female\_seats, #senior\_citizen\_seats, #physical\_handicapped\_seats, DepotID}

bustype  $\rightarrow$  {#general\_seats, #female\_seats, #senior\_citizen\_seats, #physical\_handicapped\_seats}

**TICKET**

**Primary Key :** ticketid

**Candidate Key :** ticketid

**Functional Dependencies :**

ticketid  $\rightarrow$  {cost, t\_type, gender, t\_datetime, busId, src\_stop\_Id, dest\_stopId}

**ROUTE**

**Primary Key :** RouteID

**Candidate Key :** RouteID, rname

**Functional Dependencies :**

RouteID  $\rightarrow$  {rname, src\_depot\_id, dest\_depot\_id}

rname  $\rightarrow$  {RouteID, src\_depot\_id, dest\_depot\_id}

**STOP**

**Primary Key :** StopID

**Candidate Key :** StopID, Stopname

**Functional Dependencies :**

StopID → Stopname

Stopname → StopID

**BUS DEPOT**

**Primary Key :** DepotID

**Candidate Key :** DepotID

**Functional Dependencies :** None

**RUNS ON**

**Primary Key :** {BusID, RouteID}

**Candidate Key :** {BusID, RouteID}

**Functional Dependencies :** None

**Route HAS Stops**

**Primary Key :** {RouteID, StopID}

**Candidate Key :** {RouteID, StopID}

**Functional Dependencies :** None

**Team 15 Members:**

Arun Sreekanth Bayanagari

Harshitha Ravi

Hema Sai Desai

Vinod Kumar Puttamadegowda