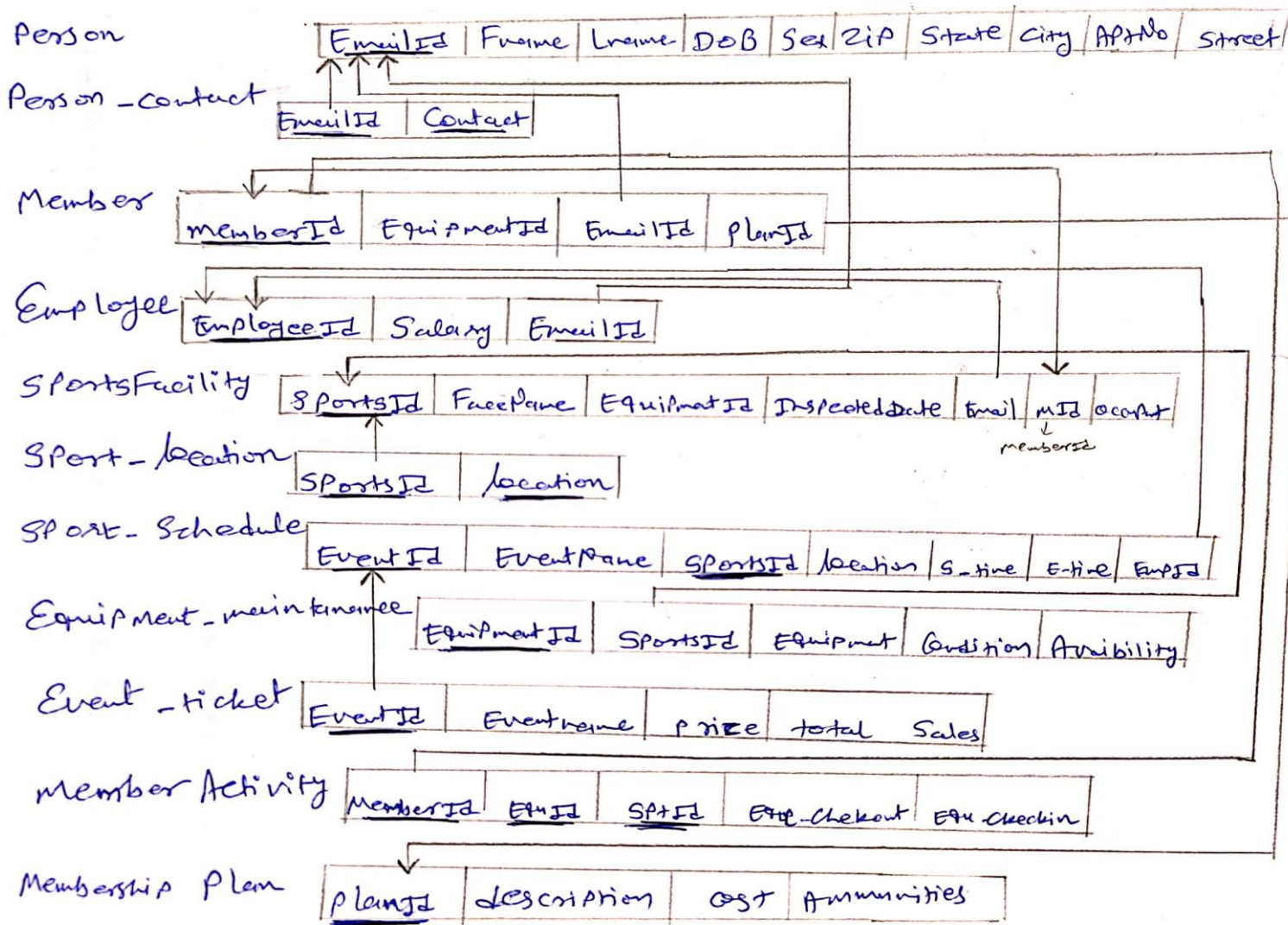


ER to Relational-mapping



Candidate keys and functional dependencies

1) Relation name: Persons

<u>emailId</u>	fname	lname	DOB	sex	zip	state	city	Appt no	street
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candidate keys : email id,

Functional Dependencies: emailId-->fname, emailId-->lname, emailId-->DOB, emailId-->sex, emailId-->zip, emailId-->state, emailId-->city, emailId-->apptNo, emailId-->street

2) Relation name: Person_contact

<u>emailId</u>	<u>contact</u>
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candidate keys : emailId and contact (both together forms candidate key)

Functional Dependencies: emailId-->contact

3) Relation name: Employee

<u>employeeId</u>	salary	emailId
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candidate keys : employeeId

Functional Dependencies: employeeId-->salary, employeeId-->emailId, emailId-->salary

4)Relation name:Member

<u>memberId</u>	equipmentId	emailId	planId
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candidate keys : memberId

Functional Dependencies: memberId-->equipmentId, memberId-->emailId,
memberId-->planId, emailId-->planId

5)Relation name:MembershipPlan

<u>planId</u>	description	cost	ammunities
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candidate keys : planId

Functional Dependencies: planId-->description, planId-->cost, planId-->ammunities,.....

6)Relation name: MemberActivity

memberId	equipmentId	sportId	Equipment-checkout	Equipment-checkin
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candidate keys : no

Functional Dependencies: no

7)Relation name: SportsFacility

<u>sportId</u>	sportName	inspectedDate	emailId	memberId	currentOccupant
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candidate keys : sportId,

Functional Dependencies: sportId-->sportName

8)Relation name: Sport_location

<u>sportId</u>	<u>location</u>
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candidate keys : sportId and location(both together)

Functional Dependencies: sportId-->location

9)Relation name: SportSchedule

<u>eventId</u>	eventName	sportId	location	Start time	End time	employeeId
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candidate keys : eventId

Functional Dependencies: eventId-->eventName, eventId-->sportId, eventId-->location,
eventId-->statTime, eventId-->EndTime, eventId-->employeeId

10)Relation name:EquipmentMaintenance

<u>equipmentId</u>	sportId	equipment name	condition	availability
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candidate keys : equipmentId

Functional Dependencies: equipmentId-->sportId, equipmentId-->equipmentName,
equipmentId--> condition, quiptmentId-->availability

11)Relation name:EventTicketSales

eventId	event name	price	total	sales
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candidate keys : eventId

Functional Dependencies: eventId--> eventName, eventId--> price, eventId--> total, eventId-->sales