**ER Diagram Assumptions:**

* Even though visitor is an actor of the system, he’s not included in the ER Diagram because none of his data are not stored in the database.
* USER is a general entity, and it is specialized into 3 other entities such as CUSTOMER, ADMIN, S\_ARENA \_STAFF.
* Furthermore, S\_ARENA\_STAFF is specialized into 3 more entities called BOOKING\_HANDLING\_STAFF, MANAGER & ADMINISTRATION\_STAFF.
* USER can search by entering the name of the sports arena as well as by entering a particular timeslot.
* CUSTOMER\_PROFILE depends upon the CUSTOMER.
* Every CUSTOMER\_PROFILE might not contain a FAVOURITE\_LIST.
* Every CUSTOMER\_PROFILE might not consist of a BOOKING.
* Every CUSTOMER might not make a BOOKING.
* INVOICE depends upon the BOOKING.
* SPORTS\_ARENA can contain more than 1 FACILITY for the same sports category. Ex: There can be 2 badminton courts in one sports arena.
* SPORTS\_ARENA\_PROFILE depends upon SPORTS\_ARENA.
* MANAGER & ADMINISTRATION\_STAFF manages a BOOKING includes booking cancellation, taking cash transactions, time-slot editing, etc.
* MANAGER of the Sports Arena can manage S\_ARENA\_STAFF includes adding and removing S\_ARENA\_STAFF to the system.
* ADMIN can manage every user including himself.