

## Project Deliverable 2

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### NORMAL FORMS:

3NF: There should not be a case where a non-prime attribute is determined by another non-prime attribute.

### FUNCTIONAL DEPENDENCIES:

1. event(Event\_ID, E\_Name, Start\_Date, End\_Date, Start\_Age, End\_Age, Capacity, Stat\_ID, Org\_ID, Ven\_ID)

- Event\_ID  $\rightarrow$  E\_Name
- Event\_ID  $\rightarrow$  Start\_Date
- Event\_ID  $\rightarrow$  End\_Date
- Event\_ID  $\rightarrow$  Start\_Age
- Event\_ID  $\rightarrow$  End\_Age
- Event\_ID  $\rightarrow$  Capacity
- Event\_ID  $\rightarrow$  Stat\_ID
- Event\_ID  $\rightarrow$  Org\_ID
- Event\_ID  $\rightarrow$  Ven\_ID

Thus, it is in 3NF .

2. category(Category\_ID, Categ\_Name)

- Category\_ID  $\rightarrow$  Categ\_Name

Thus, it is in 3NF.

3. community(Community\_ID, Comm\_Name)

- $\text{Community\_ID} \rightarrow \text{Comm\_Name}$

Thus, it is in 3NF.

4. status(Status\_ID, S\_Name)

- $\text{Status\_ID} \rightarrow \text{S\_Name}$

Thus, it is in 3NF.

5. organiser(Organiser\_ID, O\_Name)

- $\text{Organiser\_ID} \rightarrow \text{O\_Name}$

Thus, it is in 3NF.

6. venue(VenueID, V\_Name, Address)

- $\text{VenueID} \rightarrow \text{V\_Name}$
- $\text{VenueID} \rightarrow \text{Address}$

Thus, it is in 3NF.

7. ofcategory(CategoryID, EventID)

- $\text{CategoryID} \rightarrow \text{EventID}$
- $\text{EventID} \rightarrow \text{CategoryID}$

It is in 3NF.

8. ofcommunity(CommunityID, Event\_\_ID)

- $\text{CommunityID} \rightarrow \text{Event\_ID}$
- $\text{Event\_ID} \rightarrow \text{CommunityID}$

It is in 3NF.

## NORMAL FORM OF RELATIONAL SCHEMA:

- ❖ event(Event\_ID, E\_Name, Start\_Date, End\_Date, Start\_Age, End\_Age, Capacity, Stat\_ID, Org\_ID, Ven\_ID)
- ❖ category(Category\_ID, Categ\_Name)
- ❖ community(Community\_ID, Comm\_Name)
- ❖ status(Status\_ID, S\_Name)
- ❖ organiser(Organiser\_ID, O\_Name)
- ❖ venue(VenueID, V\_Name, Address)
- ❖ ofcategory(CategoryID, EventID)
- ❖ ofcommunity(CommunityID, Event\_\_ID)