

Assignment 1B: MAU Normalisation

Sample MAU ArtWork Status History Reports

Sample1:

MAU Artwork Status History			
Artwork No:	8		
Artwork Title:	Beach Sunset		
Artist Code:	1234		
Artist Name:	Michel Van Gough		
Date Added to stock:	1st Feb 2018		
Date	Artwork Status	Gallery ID	Gallery Name
01/02/2018	In MAU Warehouse		
10/03/2018	Shipped to Gallery	12	Seaside Breeze Art Gallery
10/4/2018	In MAU Warehouse		
5/5/2019	Shipped to Gallery	14	Melbourne National Gallery
20/12/2019	In MAU Warehouse		
03/01/2020	Shipped to Gallery	12	Seaside Breeze Art Gallery
28/01/2020	In MAU Warehouse		
05/02/2020	Returned to Painter		

Sample 2:

MAU Artwork Status History			
Artwork No:	12		
Artwork Title:	Reverse Blue Poles		
Artist Code:	1234		
Artist Name:	Michel Van Gough		
Date Added to stock:	25th June 2019		
Date	Artwork Status	Gallery ID	Gallery Name
25/06/2019	In MAU Warehouse		
03/07/2019	Shipped to Gallery	53	Caulfield Art Stop
10/10/2019	In MAU Warehouse		
2/12/2019	Shipped to Gallery	12	Seaside Breeze Art Gallery
20/12/2019	Sold		

UNF

ARTWORK(artwork_no,artwork_title,artist_code,artist_name,artwork_accept_date(update_date, artwork_status,gallery_id,gallery_name))

1NF

ARTWORK(artwork_no,artwork_title,artist_code,artist_name,artwork_accept_date)
Artwork_status(artwork_no,artist_code,update_date,artwork_status,gallery_id,gallery_name)

Partial Dependency

artist_code → artist_name

2NF

ARTWORK(artwork_no,artwork_title,artist_code, artwork_accept_date)

ARTIST(artist_code,artist_name)

ARTWORK_STATUS(artwork_no,artist_code,update_date,artwork_status,gallery_id,gallery_name
)

Transitive Dependency

gallery_id → gallery_name

3NF

ARTWORK(artwork_no,artwork_title,artist_code, artwork_accept_date)

ARTIST(artist_code,artist_name)

ARTWORK_STATUS(artwork_no,artist_code,update_date,artwork_status,gallery_id)

GALLERY(gallery_id,gallery_name)

Full Dependency

artwork_no → artwork_title,artist_code,artwork_accept_date

artist_code → artist_name

artwork_no,artist_code,update_date → artwork_status,gallery_id

gallery_id → gallery_name

Sample MAU GalleryDisplay Report

Sample1:

Gallery Display Report						
Gallery ID:	12					
Gallery Name:	Seaside Breeze Art Gallery					
Gallery Street:	150 Church Street					
Gallery Town:	Cowes					
Gallery State:	VIC					
Gallery Opens:	08:00					
Gallery Closes:	18:00					
Artist Code	Artwork No	Artwork Title	Artist Name	Date Exhibition Started	Date Exhibition Ended	Featured in Catalog
1234	8	Beach Sunset	Michael Van Gough	14/03/2018	1/4/2018	Yes
...						
2341	1	Whispering Gums	Margot Quigley	5/10/2018	01/06/2019	No
...						
1234	12	Reverse blue Poles	Michael Van Gough	5/12/2019	10/12/2019	Yes
...						
1234	8	Beach Sunset	Michael Van Gough	10/1/2020	15/1/2020	No
...						
3251	8	Flowers in Vase	Maryanne Flower	12/02/2020		Yes

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GALLERY(gallery_id,gallery_name,
gallery_street,gallery_town,gallery_state,gallery_opens,gallery_closes(artist_code,
artwork_no,artwork_title,artist_name,exhibition_start_date,exhibition_end_date,feature))

1NF

GALLERY(gallery_id,gallery_name,gallery_street,gallery_town,gallery_state,gallery_opens,
gallery_closes)

EXHIBITION(gallery_id,artist_code,artwork_no,artwork_title,artist_name,exhibition_start_date,
exhibition_end_date,feature)

Partial Dependency

artist_code ,artwork_no → artwork_title

artist_code → artist_name

2NF

GALLERY(gallery_id, gallery_name, gallery_street, gallery_town, gallery_state, gallery_opens, gallery_closes)

EXHIBITION(gallery_id, artist_code, artwork_no, exhibition_start_date, exhibition_end_date, feature)

ARTWORK(artist_code, artwork_no, artwork_title)

ARTIST(artist_code, artist_name)

Transitive Dependency

NONE

3NF

GALLERY(gallery_id, gallery_name, gallery_street, gallery_town, gallery_state, gallery_opens, gallery_closes)

EXHIBITION(gallery_id, artist_code, artwork_no, exhibition_start_date, exhibition_end_date, feature)

ARTWORK(artist_code, artwork_no, artwork_title)

ARTIST(artist_code, artist_name)

Full Dependency

gallery_id → gallery_name, gallery_street, gallery_town, gallery_state, gallery_opens, gallery_closes

artist_code, artwork_no, exhibition_start_date → gallery_id, exhibition_end_date, feature

artist_code, artwork_no → artwork_title

artist_code → artist_name

Attribute Synthesis:

1. ARTWORK(artwork_no, artwork_title, artist_code, artwork_accept_date)
2. ARTIST(artist_code, artist_name)
3. ARTWORK_STATUS(artwork_no, artist_code, update_date, artwork_status, gallery_id)
4. ~~GALLERY(gallery_id, gallery_name)~~
5. GALLERY(gallery_id, gallery_name, gallery_street, gallery_town, gallery_state, gallery_opens, gallery_closes)
6. EXHIBITION(gallery_id, artist_code, artwork_no, exhibition_start_date, exhibition_end_date, feature)
7. ~~ARTWORK(artist_code, artwork_no, artwork_title)~~
8. ~~ARTIST(artist_code, artist_name)~~

Final Consolidated Relations:

1. ARTWORK(artwork_no, artwork_title, artist_code, artwork_accept_date)
2. ARTIST(artist_code, artist_name)
3. ARTWORK_STATUS(artwork_no, artist_code, update_date, artwork_status, gallery_id)
4. GALLERY(gallery_id, gallery_name, gallery_street, gallery_town, gallery_state, gallery_opens, gallery_closes)
5. EXHIBITION(gallery_id, artist_code, artwork_no, exhibition_start_date, exhibition_end_date, feature)