Vanessa Joyce Tan
30556864

MAU Artwork Status History Report

UNF

ARTWORK(artwork_no, artwork_title, artist_code, artist_givname, artist_famname, date_added_stock (status_date, artwork_status, gallery_id, gallery_name))

1NF

ARTWORK(<u>artwork_no</u>, artwork_title, <u>artist_code</u>, artist_givname, artist_famname, date_added_stock)

STATUS(<u>artwork_no</u>, <u>artist_code</u>, <u>status_date</u>, artwork_status, gallery_id, gallery_name)

Partial dependencies:

artist_code → artist_givname, artist_famname

2NF

ARTWORK(<u>artwork_no</u>, artwork_title, <u>artist_code</u>, date_added_stock)

ARTIST(<u>artist_code</u>, artist_givname, artist_famname)

STATUS(<u>artwork_no</u>, <u>artist_code</u>, <u>status_date</u>, artwork_status, gallery_id, gallery_name)

Transitive dependencies:

gallery_id → gallery_name

3NF

ARTWORK(<u>artwork_no</u>, artwork_title, <u>artist_code</u>, date_added_stock)

ARTIST(<u>artist_code</u>, artist_givname, artist_famname)

STATUS(<u>artwork_no</u>, <u>artist_code</u>, <u>status_date</u>, artwork_status, gallery_id)

GALLERY(<u>gallery_id</u>, gallery_name)

Full dependencies:

artwork_no, artist_code → artwork_title, date_added_stock

artist_code → artist_givname, artist_famname

artwork_no, artist_code, status_date → artwork_status, gallery_id

gallery_id → gallery_name

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MAU Gallery Display Report

UNF
GALLERY(gallery_id, gallery_name, gallery_street, gallery_town, gallery_state, gallery_open_time, gallery_close_time (artist_code, artwork_no, artwork_title, artist_name, exhibit_start_date, exhibit_end_date, exhibit_catalog_feature))

1NF
GALLERY(<u>gallery_id</u>, gallery_name, gallery_street, gallery_town, gallery_state, gallery_open_time, gallery_close_time)
EXHIBIT(gallery_id, <u>artist_code</u>, <u>artwork_no</u>, artwork_title, artist_givname, artist_famname, <u>exhibit_start_date</u>, exhibit_end_date, exhibit_catalog_feature)

Partial dependencies:
artist_code → artist_givname, artist_famname
artist_code, artwork_no → artwork_title

2NF
GALLERY(<u>gallery_id</u>, gallery_name, gallery_street, gallery_town, gallery_state, gallery_open_time, gallery_close_time)
EXHIBIT(gallery_id, <u>artist_code</u>, <u>artwork_no</u>, <u>exhibit_start_date</u>, exhibit_end_date, exhibit_catalog_feature)
ARTWORK(<u>artist_code</u>, <u>artwork_no</u>, artwork_title)
ARTIST(<u>artist_code</u>, artist_givname, artist_famname)

Transitive dependencies:
No transitive dependencies

3NF
GALLERY(<u>gallery_id</u>, gallery_name, gallery_street, gallery_town, gallery_state, gallery_open_time, gallery_close_time)
EXHIBIT(gallery_id, <u>artist_code</u>, <u>artwork_no</u>, <u>exhibit_start_date</u>, exhibit_end_date, exhibit_catalog_feature)
ARTWORK(<u>artist_code</u>, <u>artwork_no</u>, artwork_title)
ARTIST(<u>artist_code</u>, artist_givname, artist_famname)

Full dependencies:
gallery_id → gallery_name, gallery_street, gallery_town, gallery_state, gallery_open_time, gallery_close_time
artist_code, artwork_no, exhibit_start_date → exhibit_end_date, exhibit_catalog_feature
artist_code, artwork_no → artwork_title
artist_code → artist_givname, artist_famname

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COLLECTED 3NF RELATIONS:
1. ARTWORK(<u>artwork_no</u>, artwork_title, <u>artist_code</u>, date_added_stock)
2. ARTIST(<u>artist_code</u>, artist_givname, artist_famname)
3. STATUS(<u>artwork_no</u>, <u>artist_code</u>, <u>status_date</u>, artwork_status, gallery_id)
4. GALLERY(<u>gallery_id</u>, gallery_name)
5. GALLERY(<u>gallery_id</u>, gallery_name, gallery_street, gallery_town, gallery_state, gallery_open_time, gallery_close_time)
6. EXHIBIT(gallery_id, <u>artist_code</u>, <u>artwork_no</u>, <u>exhibit_start_date</u>, exhibit_end_date, exhibit_catalog_feature)
7. ARTWORK(<u>artist_code</u>, <u>artwork_no</u>, artwork_title)
8. ARTIST(<u>artist_code</u>, artist_givname, artist_famname)

ATTRIBUTE SYNTHESIS
1. & 7.
ARTWORK(<u>artist_code</u>, <u>artwork_no</u>, artwork_title, date_added_stock)
Relation name prefixes must be maintained, so attribute date_added_stock must be renamed to artwork_date_added:
ARTWORK(<u>artist_code</u>, <u>artwork_no</u>, artwork_title, artwork_date_added)

2. & 8.
ARTIST(<u>artist_code</u>, artist_givname, artist_famname)

3.
STATUS(<u>artist_code</u>, <u>artwork_no</u>, <u>status_date</u>, artwork_status, gallery_id)
Relation name prefixes must be maintained, so attribute artwork_status must be renamed to status_desc:
STATUS(<u>artist_code</u>, <u>artwork_no</u>, <u>status_date</u>, status_desc, gallery_id)

4. & 5.
GALLERY(<u>gallery_id</u>, gallery_name, gallery_street, gallery_town, gallery_state, gallery_open_time, gallery_close_time)

6.
EXHIBIT(<u>artist_code</u>, <u>artwork_no</u>, <u>exhibit_start_date</u>, exhibit_end_date, exhibit_catalog_feature, gallery_id)