## **Normalization**

MAU Artwork Status History Reports

UNF

**STATUS** (artwork\_no, artwork\_title, artist\_code, artist\_name, date\_added, (status\_date, status\_artwork, gallery\_id, gallery\_name))

1NF

**ARTWORK** (artist\_code, artwork\_no, artwork\_title, artist\_given\_name, artist\_family\_name, date added)

**STATUS** (artist code, artwork no, status date, status artwork, gallery id, gallery name)

Partial dependencies: artist code -> artist given name, artist family name

2NF

**ARTWORK** (artist\_code, artwork\_no, artwork\_title, artist\_given\_name, artist\_family\_name, date\_added)

**ARTIST** (artist code, artist\_given\_name, artist\_family\_name)

**STATUS** (artist code, artwork no, status date, status\_artwork, gallery\_id, gallery\_name)

Transitive dependencies: gallery id -> gallery name

3NF

**ARTWORK** (artist code, artwork no, artwork title, date added)

**ARTIST** (artist code, artist given name, artist family name)

**STATUS** (artist code, artwork no, status date, status\_artwork, gallery\_id)

**GALLERY** (gallery id, gallery\_name)

#### Full dependencies

artist code, artwork no -> artwork title, date added

artist code -> artist given name, artist family name

artist code, artwork no, status date -> status artwork, gallery id

gallery id -> gallery name

## MAU Gallery Display Report

UNF

**GALLERY** (gallery\_id, gallery\_name, gallery\_street, gallery\_town, gallery\_state, gallery\_open, gallery\_close (artist\_code, artwork\_no, artwork\_title, artist\_name, date\_start, date\_end, featured\_catalog))

1NF

**GALLERY** (gallery\_id, gallery\_name, gallery\_street, gallery\_town, gallery\_state, gallery\_open, gallery\_close)

**EXHIBIT** (<u>artist\_code</u>, <u>artwork\_no</u>, artwork\_title, artist\_given\_name, artist\_family\_name, <u>date\_start</u>, <u>date\_end</u>, featured\_catalog)

Partial Dependencies: artist\_code -> artist\_given\_name, artist\_family\_name artwork no, artist code -> artwork title

2NF

**GALLERY** (gallery\_id, gallery\_name, gallery\_street, gallery\_town, gallery\_state, gallery\_open, gallery\_close)

**EXHIBIT** (artist code, artwork no, date start, date end, featured catalog)

**ARTWORK** (artwork no, artist code, artwork title)

**ARTIST** (artist code, artist\_given\_name, artist\_family\_name)

Transitive Dependencies: None present

3NF

**GALLERY** (gallery\_id, gallery\_name, gallery\_street, gallery\_town, gallery\_state, gallery\_open, gallery\_close)

**EXHIBIT** (artist code, artwork no, date start, date\_end, featured\_catalog)

**ARTWORK** (artwork no, artist code, artwork title)

**ARTIST** (artist code, artist\_given\_name, artist\_family\_name)

### Full dependencies

gallery\_id -> gallery\_name, gallery\_street, gallery\_town, gallery\_state, gallery\_open, gallery\_close

artist\_code, artwork\_no, date\_start -> date\_end, featured\_catalog

artist\_code, artwork\_no -> artwork\_title

artist\_code-> artist\_given\_name, artist\_family\_name

### **Collected 3NF relations**

**GALLERY** (gallery\_id, gallery\_name, gallery\_street, gallery\_town, gallery\_state, gallery\_open, gallery\_close)

**EXHIBIT** (artist code, artwork no, date start, date\_end, featured\_catalog)

**ARTWORK** (artwork no, artist code, artwork\_title)

**ARTIST** (<u>artist\_code</u>, artist\_given\_name, artist\_family\_name)

**ARTWORK** (<u>artist\_code</u>, <u>artwork\_no</u>, artwork\_title, date\_added)

**ARTIST** (artist code, artist\_given\_name, artist\_family\_name)

**STATUS** (artist code, artwork no, status date, status\_artwork, gallery\_id)

**GALLERY** (gallery id, gallery\_name)

# **Attribute Synthesis**

**GALLERY** (gallery\_id, gallery\_name, gallery\_street, gallery\_town, gallery\_state, gallery\_open, gallery\_close)

**EXHIBIT** (artist code, artwork no, date start, date\_end, featured\_catalog)

**ARTIST** (artist code, artist\_given\_name, artist\_family\_name)

**ARTWORK** (artist code, artwork no, artwork\_title, date\_added)

**STATUS** (artist code, artwork no, status date, status artwork, gallery id)