

	TTOTA
	USEK

- Entity

## Relation schema:

 $\pmb{USER}(\underline{\text{USERID}},\,\text{FNAME},\,\text{LNAME})$ 

## Primary keys:

 $\bullet\,$  USERID is the primary key.

## Foreign keys:

• None.

# 2 SONG

- Entity

### Relation schema:

**SONG**(SONGID, TITLE, ARTISTNAME)

## Primary keys:

 $\bullet\,$  SONGID is the primary key.

# Foreign keys:

• None.

# 3 CONTRIBUTOR

- Entity

### Relation schema:

 $CONTRIBUTOR(\underline{\mathrm{CONTRIBUTORID}},\,\mathrm{CNAME})$ 

# Primary keys:

 $\bullet\,$  CONTRIBUTORID is the primary key.

# Foreign keys:

• None.

# 4 CONTRIBUTE

Many-to-Many Relationship between the SONG and CONTRIBUTOR entities.

#### Relation schema:

# $\pmb{CONTRIBUTE}(\underline{SONGID}, \underline{CONTRIBUTORID}, CONTRIBUTIONTYPE)$

## Primary keys:

- SONGID
- CONTRIBUTORID

### Foreign keys:

- SONGID home relation: SONG
- CONTRIBUTORID home relation: CONTRIBUTOR

### 5 KARAOKEFILE

- Entitiy

### Relation schema:

KARAOKEFILE(FILEID, SONGID, VERSION) - Entity

## Primary keys:

 $\bullet\,$  FILEID is the primary key.

## Foreign keys:

• SONGID - home relation: SONG

# 6 PICK

Many-to-Many Relationship between the USER and SONG entities.

### Relation schema:

PICK(USERID, SONGID, QUEUETYPE, PAID, TIME, FILEID)

### Primary keys:

- USERID
- SONGID

## Foreign keys:

- USERID home relation: USER
- SONGID home relation: SONG
- FILEID home relation: KARAOKEFILE