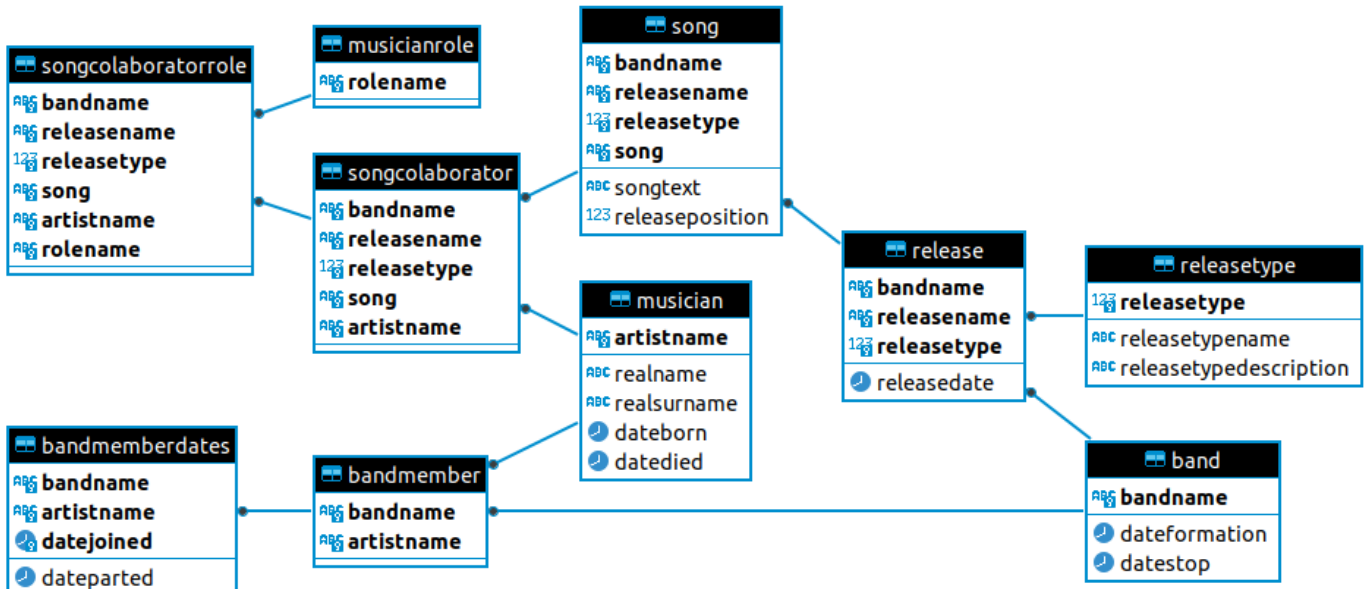


Create a sql database

for the purpose of this tutorial, I created a test database in mysql on freesqldatabase.com

It is a simplified version of a music catalogue.



If you have a mysql database created, execute this script

```
-- MySQL dump 10.13  Distrib 8.0.27, for Linux (x86_64)
--
-- Host: sql6.freesqldatabase.com    Database: sql6449948
--
-- Server version          5.5.62-0ubuntu0.14.04.1

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!50503 SET NAMES utf8mb4 */;
/*!40103 SET @OLD_TIME_ZONE=@@TIME_ZONE */;
/*!40103 SET TIME_ZONE='+00:00' */;
/*!40014 SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0 */;
/*!40014 SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS,
FOREIGN_KEY_CHECKS=0 */;
/*!40101 SET @OLD_SQL_MODE=@@SQL_MODE, SQL_MODE='NO_AUTO_VALUE_ON_ZERO'
*/;
/*!40111 SET @OLD_SQL_NOTES=@@SQL_NOTES, SQL_NOTES=0 */;

--
-- Table structure for table `band`
--

DROP TABLE IF EXISTS `band`;
/*!40101 SET @saved_cs_client      = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `band` (
```

```

    `bandname` varchar(100) NOT NULL COMMENT 'band official name',
    `dateformation` date DEFAULT NULL COMMENT 'date the band formed
officially',
    `datestop` date DEFAULT NULL COMMENT 'band stop date',
    PRIMARY KEY (`bandname`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `band`
--

LOCK TABLES `band` WRITE;
/*!40000 ALTER TABLE `band` DISABLE KEYS */;
/*!40000 ALTER TABLE `band` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `bandmember`
--

DROP TABLE IF EXISTS `bandmember`;
/*!40101 SET @saved_cs_client      = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `bandmember` (
  `bandname` varchar(100) NOT NULL COMMENT 'band foreign key',
  `artistname` varchar(50) NOT NULL COMMENT 'artist foreign key',
  PRIMARY KEY (`bandname`,`artistname`),
  KEY `bandmember_FK` (`artistname`),
  CONSTRAINT `bandmember_FK` FOREIGN KEY (`artistname`) REFERENCES
`musician` (`artistname`),
  CONSTRAINT `bandmember_FK_1` FOREIGN KEY (`bandname`) REFERENCES
`band` (`bandname`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COMMENT='relational table
between band and musician';
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `bandmember`
--

LOCK TABLES `bandmember` WRITE;
/*!40000 ALTER TABLE `bandmember` DISABLE KEYS */;
/*!40000 ALTER TABLE `bandmember` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `bandmemberdates`
--

```

```

DROP TABLE IF EXISTS `bandmemberdates`;
/*!40101 SET @saved_cs_client      = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `bandmemberdates` (
  `bandname` varchar(100) NOT NULL COMMENT 'bandmember foreign key',
  `artistname` varchar(50) NOT NULL COMMENT 'bandmember foreign key',
  `datejoined` date NOT NULL COMMENT 'date (re)joined the band',
  `dateparted` date DEFAULT NULL COMMENT 'date parted the band',
  PRIMARY KEY (`bandname`,`artistname`,`datejoined`),
  CONSTRAINT `bandmemberdates_FK` FOREIGN KEY (`bandname`,
`artistname`) REFERENCES `bandmember` (`bandname`, `artistname`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `bandmemberdates`
--

LOCK TABLES `bandmemberdates` WRITE;
/*!40000 ALTER TABLE `bandmemberdates` DISABLE KEYS */;
/*!40000 ALTER TABLE `bandmemberdates` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `musician`
--

DROP TABLE IF EXISTS `musician`;
/*!40101 SET @saved_cs_client      = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `musician` (
  `artistname` varchar(50) NOT NULL COMMENT 'Artist identification
name, is unique due to copyright',
  `realname` varchar(30) DEFAULT NULL COMMENT 'real name',
  `realsurname` varchar(50) DEFAULT NULL COMMENT 'real surname',
  `dateborn` date DEFAULT NULL,
  `datedied` date DEFAULT NULL,
  PRIMARY KEY (`artistname`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `musician`
--

LOCK TABLES `musician` WRITE;
/*!40000 ALTER TABLE `musician` DISABLE KEYS */;
/*!40000 ALTER TABLE `musician` ENABLE KEYS */;
UNLOCK TABLES;

```

```

--
-- Table structure for table `musicianrole`
--

DROP TABLE IF EXISTS `musicianrole`;
/*!40101 SET @saved_cs_client      = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `musicianrole` (
  `rolename` varchar(30) NOT NULL COMMENT 'musician role name',
  PRIMARY KEY (`rolename`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COMMENT='contribution type to a song';
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `musicianrole`
--

LOCK TABLES `musicianrole` WRITE;
/*!40000 ALTER TABLE `musicianrole` DISABLE KEYS */;
/*!40000 ALTER TABLE `musicianrole` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `release`
--

DROP TABLE IF EXISTS `release`;
/*!40101 SET @saved_cs_client      = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `release` (
  `bandname` varchar(100) NOT NULL COMMENT 'band foreign key',
  `releasename` varchar(100) NOT NULL COMMENT 'album or single name',
  `releasetype` smallint(6) NOT NULL COMMENT 'releasetype foreign key',
  `releasedate` date NOT NULL,
  PRIMARY KEY (`bandname`,`releasename`,`releasetype`),
  KEY `release_FK` (`releasetype`),
  CONSTRAINT `release_FK` FOREIGN KEY (`releasetype`) REFERENCES
`releasetype` (`releasetype`),
  CONSTRAINT `release_FK_1` FOREIGN KEY (`bandname`) REFERENCES `band`
(`bandname`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COMMENT='album/single release';
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `release`
--

LOCK TABLES `release` WRITE;
/*!40000 ALTER TABLE `release` DISABLE KEYS */;

```

```

/*!40000 ALTER TABLE `release` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `releasetype`
--

DROP TABLE IF EXISTS `releasetype`;
/*!40101 SET @saved_cs_client      = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `releasetype` (
  `releasetype` smallint(6) NOT NULL COMMENT 'release type code',
  `releasetypename` varchar(25) NOT NULL COMMENT 'type name',
  `releasetypedescription` varchar(100) DEFAULT NULL COMMENT 'full
description',
  PRIMARY KEY (`releasetype`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COMMENT='release types\ncode
table';
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `releasetype`
--

LOCK TABLES `releasetype` WRITE;
/*!40000 ALTER TABLE `releasetype` DISABLE KEYS */;
/*!40000 ALTER TABLE `releasetype` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `song`
--

DROP TABLE IF EXISTS `song`;
/*!40101 SET @saved_cs_client      = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `song` (
  `bandname` varchar(100) NOT NULL COMMENT 'release foreign key',
  `releasename` varchar(100) NOT NULL COMMENT 'release foreign key',
  `releasetype` smallint(6) NOT NULL COMMENT 'releasetype foreign key',
  `song` varchar(100) NOT NULL COMMENT 'song name',
  `songtext` text,
  PRIMARY KEY (`bandname`,`releasename`,`releasetype`,`song`),
  CONSTRAINT `song_FK` FOREIGN KEY (`bandname`,`releasename`,`releasetype`) REFERENCES `release` (`bandname`,`releasename`,`releasetype`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
/*!40101 SET character_set_client = @saved_cs_client */;

--

```

```

-- Dumping data for table `song`
--

LOCK TABLES `song` WRITE;
/*!40000 ALTER TABLE `song` DISABLE KEYS */;
/*!40000 ALTER TABLE `song` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `songcolaborator`
--

DROP TABLE IF EXISTS `songcolaborator`;
/*!40101 SET @saved_cs_client      = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `songcolaborator` (
  `bandname` varchar(100) NOT NULL COMMENT 'song foreign key',
  `releasename` varchar(100) NOT NULL COMMENT 'song foreign key',
  `releasetype` smallint(6) NOT NULL COMMENT 'song foreign key',
  `song` varchar(100) NOT NULL COMMENT 'song foreign key',
  `artistname` varchar(50) NOT NULL COMMENT 'musician foreign key',
  PRIMARY KEY (`bandname`,`releasename`,`releasetype`,`song`,`artistname`),
  KEY `songcolaborator_FK` (`artistname`),
  CONSTRAINT `songcolaborator_FK` FOREIGN KEY (`artistname`) REFERENCES
`musician` (`artistname`),
  CONSTRAINT `songcolaborator_FK_1` FOREIGN KEY (`bandname`,`releasename`,`releasetype`,`song`) REFERENCES `song` (`bandname`,`releasename`,`releasetype`,`song`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COMMENT='involved in music performance';
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `songcolaborator`
--

LOCK TABLES `songcolaborator` WRITE;
/*!40000 ALTER TABLE `songcolaborator` DISABLE KEYS */;
/*!40000 ALTER TABLE `songcolaborator` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `songcolaboratorrole`
--

DROP TABLE IF EXISTS `songcolaboratorrole`;
/*!40101 SET @saved_cs_client      = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `songcolaboratorrole` (

```

```

    `bandname` varchar(100) NOT NULL COMMENT 'songcolaborator foreign
key',
    `releasename` varchar(100) NOT NULL COMMENT 'songcolaborator foreign
key',
    `releasetype` smallint(6) NOT NULL COMMENT 'songcolaborator foreign
key',
    `song` varchar(100) NOT NULL COMMENT 'songcolaborator foreign key',
    `artistname` varchar(50) NOT NULL COMMENT 'songcolaborator foreign
key',
    `rolename` varchar(30) NOT NULL COMMENT 'musicianrole foreign key',
    PRIMARY KEY (`bandname`,`releasename`,`releasetype`,`song`,
`artistname`,`rolename`),
    KEY `songcolaboratorrole_FK_1` (`rolename`),
    CONSTRAINT `songcolaboratorrole_FK` FOREIGN KEY (`bandname`,
`releasename`, `releasetype`, `song`, `artistname`) REFERENCES
`songcolaborator` (`bandname`, `releasename`, `releasetype`, `song`,
`artistname`),
    CONSTRAINT `songcolaboratorrole_FK_1` FOREIGN KEY (`rolename`)
REFERENCES `musicianrole` (`rolename`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COMMENT='role a musician played
in a song production\nrelational table between songcolaborator and
musician';
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `songcolaboratorrole`
--

LOCK TABLES `songcolaboratorrole` WRITE;
/*!40000 ALTER TABLE `songcolaboratorrole` DISABLE KEYS */;
/*!40000 ALTER TABLE `songcolaboratorrole` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Dumping routines for database 'sql6449948'
--
/*!40103 SET TIME_ZONE=@OLD_TIME_ZONE */;

/*!40101 SET SQL_MODE=@OLD_SQL_MODE */;
/*!40014 SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS */;
/*!40014 SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS */;
/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;
/*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;
/*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;
/*!40111 SET SQL_NOTES=@OLD_SQL_NOTES */;

-- Dump completed on 2021-11-16 17:47:53

```