TEAM 32
Phase [2]

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Relational Schema Diagram

Company = (Name)

Theater = (CompName[fk4], Name, State, City, Street, Zipcode, Capacity, Manager[fk5])
fk4: CompName -> Company.Name
fk5: Manager -> Manager.Username

MoviePlay = (Date,TName, CName[fk9],MName, ReleaseDate[fk10])
fk9:TName, CName -> Theater.Name, Theater.CompName
fk10:MName, ReleaseDate -> Movie.Name, Movie.ReleaseDate

Movie = (Name, ReleaseDate, Duration）

CreditCard = (CreditCardNum, Master[fk6])
fk6: Master -> Customer.Username , Master is non-null

User = (Username, Status, Password, Firstname, Lastname）

Employee = (Username [fk13])
fk13: Username -> User.Username

Customer = (Username [fk14])
fk14: Username -> User.Username

Admin = (Username [fk1])
fk1:Username -> Employee.Username

Manager = (Zipcode,Street,City,State,Username [fk2],Works-in [fk3])
fk2:Username -> Employee.Username,
fk3: Works-in -> Company.Name , Works-in is non-null

Visit = (Username[fk7], Date, TName, CName[fk8],ID)
fk7: Username -> User.Username
fk8: TName, CName -> Theater.Name, Theater.CompName

Used = (Date,TName, CName,MName, ReleaseDate[fk11],CreditCardNum[fk12])
fk11:Date,TName, CName,MName, ReleaseDate -> MoviePlay.Date, MoviePlay.TName,
MoviePlay.CName,MoviePlay.MName, MovieMoviePlay.ReleaseDate
fk12: CreditCardNum -> CreditCard.CreditCardNum

Physical Schema Listings:

```sql
CREATE DATABASE  IF NOT EXISTS `atlanta_movie` /*!40100 DEFAULT CHARACTER SET utf8mb4
COLLATE utf8mb4_0900_ai_ci */ /*!80016 DEFAULT ENCRYPTION='N' */;
USE `atlanta_movie`;
-- MySQL dump 10.13  Distrib 8.0.17, for macos10.14 (x86_64)
--
-- Host: localhost    Database: atlanta_movie
-- ------------------------------------------------------
-- Server version   8.0.17

/*!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 utf8 */;
/*!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 `admin`
--

DROP TABLE IF EXISTS `admin`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `admin` (
  `Username` varchar(45) NOT NULL,
  PRIMARY KEY (`Username`),
  UNIQUE KEY `Username_UNIQUE` (`Username`),
  CONSTRAINT `fk1` FOREIGN KEY (`Username`) REFERENCES `employee` (`Username`) ON
DELETE CASCADE ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `admin`
--

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

--
-- Table structure for table `company`
--

DROP TABLE IF EXISTS `company`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `company` (
  `Name` varchar(45) NOT NULL,
  PRIMARY KEY (`Name`),
```

```sql
  UNIQUE KEY `Name_UNIQUE` (`Name`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `company`
--

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

--
-- Table structure for table `credit_card`
--

DROP TABLE IF EXISTS `credit_card`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `credit_card` (
  `Credit_Card_Num` char(16) NOT NULL,
  `Master` varchar(45) NOT NULL,
  PRIMARY KEY (`Credit_Card_Num`),
  KEY `fk6_idx` (`Master`),
  CONSTRAINT `fk6` FOREIGN KEY (`Master`) REFERENCES `customer` (`Username`) ON DELETE
CASCADE ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `credit_card`
--

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

--
-- Table structure for table `customer`
--

DROP TABLE IF EXISTS `customer`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `customer` (
  `Username` varchar(45) NOT NULL,
  PRIMARY KEY (`Username`),
  UNIQUE KEY `Username_UNIQUE` (`Username`),
  CONSTRAINT `fk14` FOREIGN KEY (`Username`) REFERENCES `user` (`Username`) ON DELETE
CASCADE ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `customer`
--

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

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

--
-- Table structure for table `employee`
--

DROP TABLE IF EXISTS `employee`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `employee` (
  `Username` varchar(45) NOT NULL,
  PRIMARY KEY (`Username`),
  UNIQUE KEY `Username_UNIQUE` (`Username`),
  CONSTRAINT `fk13` FOREIGN KEY (`Username`) REFERENCES `user` (`Username`) ON DELETE
CASCADE ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `employee`
--

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

--
-- Table structure for table `manager`
--

DROP TABLE IF EXISTS `manager`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `manager` (
  `Username` varchar(45) NOT NULL,
  `Works_in` varchar(45) NOT NULL,
  `Street` varchar(45) NOT NULL,
  `City` varchar(45) NOT NULL,
  `State`
enum('AL','AK','AZ','AR','CA','CO','CT','DE','FL','GA','HI','ID','IL','IN','IA','KS','
KY','LA','ME','MD','MA','MI','MN','MS','MO','MT','NE','NV','NH','NJ','NM','NY','NC','N
D','OH','OK','OR','PA','RI','SC','SD','TN','TX','UT','VT','VA','WA','WV','WI','WY')
NOT NULL,
  `Zipcode` varchar(45) NOT NULL,
  PRIMARY KEY (`Username`),
  UNIQUE KEY `address.Unique` (`Street`,`City`,`State`,`Zipcode`),
  KEY `fk3_idx` (`Works_in`),
  CONSTRAINT `fk2` FOREIGN KEY (`Username`) REFERENCES `employee` (`Username`) ON
DELETE CASCADE ON UPDATE CASCADE,
  CONSTRAINT `fk3` FOREIGN KEY (`Works_in`) REFERENCES `company` (`Name`) ON DELETE
RESTRICT ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `manager`
--

LOCK TABLES `manager` WRITE;
```

```sql
/*!40000 ALTER TABLE `manager` DISABLE KEYS */;
/*!40000 ALTER TABLE `manager` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `movie`
--

DROP TABLE IF EXISTS `movie`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `movie` (
  `Name` varchar(45) NOT NULL,
  `Release_date` datetime NOT NULL,
  `Duration` int(11) NOT NULL,
  PRIMARY KEY (`Name`,`Release_date`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `movie`
--

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

--
-- Table structure for table `movie_play`
--

DROP TABLE IF EXISTS `movie_play`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `movie_play` (
  `Date` datetime NOT NULL,
  `Tname` varchar(45) NOT NULL,
  `Cname` varchar(45) NOT NULL,
  `Mname` varchar(45) NOT NULL,
  `ReleaseDate` datetime NOT NULL,
  PRIMARY KEY (`Date`,`Tname`,`Cname`,`Mname`,`ReleaseDate`),
  UNIQUE KEY `fk9_idx` (`Tname`,`Cname`),
  UNIQUE KEY `fk10_idx` (`Mname`,`ReleaseDate`),
  CONSTRAINT `fk10` FOREIGN KEY (`Mname`, `ReleaseDate`) REFERENCES `movie` (`Name`,
`Release_date`) ON DELETE CASCADE ON UPDATE CASCADE,
  CONSTRAINT `fk9` FOREIGN KEY (`Tname`, `Cname`) REFERENCES `theater` (`Name`,
`CompName`) ON DELETE CASCADE ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `movie_play`
--

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

--
```

```sql
--
-- Table structure for table `Theater`
--

DROP TABLE IF EXISTS `Theater`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `Theater` (
  `Name` varchar(45) NOT NULL,
  `CompName` varchar(45) NOT NULL,
  `manager` varchar(45) NOT NULL,
  `State`
enum('AL','AK','AZ','AR','CA','CO','CT','DE','FL','GA','HI','ID','IL','IN','IA','KS','
KY','LA','ME','MD','MA','MI','MN','MS','MO','MT','NE','NV','NH','NJ','NM','NY','NC','N
D','OH','OK','OR','PA','RI','SC','SD','TN','TX','UT','VT','VA','WA','WV','WI','WY')
NOT NULL,
  `City` varchar(45) NOT NULL,
  `Zipcode` int(11) NOT NULL,
  `Capacity` int(11) NOT NULL,
  PRIMARY KEY (`Name`,`CompName`),
  KEY `fk5_idx` (`manager`),
  KEY `fk4_idx` (`CompName`),
  CONSTRAINT `fk4` FOREIGN KEY (`CompName`) REFERENCES `company` (`Name`) ON DELETE
CASCADE ON UPDATE CASCADE,
  CONSTRAINT `fk5` FOREIGN KEY (`manager`) REFERENCES `manager` (`Username`) ON DELETE
RESTRICT ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `Theater`
--

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

--
-- Table structure for table `used`
--

DROP TABLE IF EXISTS `used`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `used` (
  `Date` datetime NOT NULL,
  `Tname` varchar(45) NOT NULL,
  `Cname` varchar(45) NOT NULL,
  `Mname` varchar(45) NOT NULL,
  `ReleaseDate` datetime NOT NULL,
  `CreditCardNum` char(16) NOT NULL,
  PRIMARY KEY (`Date`,`Tname`,`Cname`,`Mname`,`ReleaseDate`),
  KEY `fk13_idx` (`CreditCardNum`),
  CONSTRAINT `fk11` FOREIGN KEY (`Date`, `Tname`, `Cname`, `Mname`, `ReleaseDate`)
REFERENCES `movie_play` (`Date`, `Tname`, `Cname`, `Mname`, `ReleaseDate`) ON DELETE
CASCADE ON UPDATE CASCADE,
  CONSTRAINT `fk12` FOREIGN KEY (`CreditCardNum`) REFERENCES `credit_card`
(`Credit_Card_Num`) ON DELETE CASCADE ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;
```

```sql
--
-- Dumping data for table `used`
--

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

--
-- Table structure for table `user`
--

DROP TABLE IF EXISTS `user`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `user` (
  `Username` varchar(45) NOT NULL,
  `Status` enum('Pending','Declined','Approved','All') NOT NULL,
  `Password` varchar(45) NOT NULL,
  `First_name` varchar(45) NOT NULL,
  `Last_name` varchar(45) NOT NULL,
  PRIMARY KEY (`Username`),
  UNIQUE KEY `Username_UNIQUE` (`Username`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `user`
--

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

--
-- Table structure for table `visit`
--

DROP TABLE IF EXISTS `visit`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `visit` (
  `Username` varchar(45) NOT NULL,
  `Date` datetime NOT NULL,
  `Tname` varchar(45) NOT NULL,
  `Cname` varchar(45) NOT NULL,
  `ID` varchar(45) NOT NULL,
  PRIMARY KEY (`ID`),
  KEY `fk7_idx` (`Username`),
  KEY `fk8_idx` (`Tname`,`Cname`),
  CONSTRAINT `fk7` FOREIGN KEY (`Username`) REFERENCES `user` (`Username`) ON DELETE
CASCADE ON UPDATE CASCADE,
  CONSTRAINT `fk8` FOREIGN KEY (`Tname`, `Cname`) REFERENCES `theater` (`Name`,
`CompName`) ON DELETE CASCADE ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `visit`
```

```sql
--

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


--
-- Dumping events for database 'atlanta_movie'
--


--
-- Dumping routines for database 'atlanta_movie'
--
/*!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 */;
```