Célie Pierre Sarah Lawrence Reihaneh Maarefdoust COS 457 Database Systems Database Systems Project Part 1: ER diagram October 16, 2023

# Pawnee Commons:

Database for Creators and Fans of Parks and Recreation

## Entity: Episode

The entity Episode represents all the episodes made in the show. It includes the attributes description, which is the summary of the episodes; title, which is the title of the episode; original air date, which is the date the episode was shown to US viewers; and the US viewers, which is the number of United States viewers for an episode. The episode number overall is a key attribute, derived attribute, and a composite attribute, which is comprised of episode numbers used in each season and the season numbers. The Episode entity will link to both Person and Transcript through relationships (see below).

## **Entity: Transcripts**

The entity Transcripts represents the transcripts that are said by characters. It includes the key attribute and multivalued attribute called Line number. Line number is the number used to identify the line. It finally includes a multivalued attribute called dialogue, which includes the dialogue of the characters in the show.

## **Entity: Person**

The Person entity represents the people who worked on the show, including cast and crew. It includes the key attribute Person ID, which is a number used to identify the person; a composite attribute Name, which will be comprised of first name, middle name, and last name; and the multivalued attribute Job Title which will include the job(s) they held on the show. The Person entity will link to both Character and Episode through relationships (see below).

## **Entity: Character**

The characters played on the show. A one person plays a character and any person plays at least no characters and at most plays one character.

## **Entity: Viewers**

Represents the viewers information who views the show. It is as a weak entity, we decided to distinct these attributes as a new entity to be able work on more and if we want to add data from other databases in this field that will be easier.

## Relationship: Plays

The Plays relationship will connect the Character entity to the Person entity. This relationship will show that a Person might play a Character. The cardinality is 1..1 for the Character entity to the Plays relationship because someone has to play a character. The cardinality is 0..1 for Plays relationship to the person because a person can play a character or not.

## Relationship: Views

The Views relationship will connect the Episode entity to the Viewers entity. Since this is a total participation relationship it will show that every episode has to have views. The cardinality is 1..1 since each episode has at minimum and at most one view.

## Relationship: Works On

The Works On relationship will connect the Person entity to the Episode entity. This relationship will show what Person worked on which Episode. The cardinality is 1..N since each person in the database will work on at least one episode and at most all episodes.

## Relationship: Has

The Has relationship will connect the Episode entity to the Transcript entity. Since this is a total participation relationship it will show that every episode has a transcript. The cardinality is 1..1 since each one episode has at minimum and at most one transcript.

## Relationship: Says

The Says relationship will connect the Character entity to the Transcript entity. This relationship will show that a character might have a transcript. The cardinality is 0..N for Character entity to

the Says relationship this is cause there can be no to many characters that say a transcript. The cardinality is 1..N for Says relationship to the Transcript entity this is cause one character has to say the transcripts.

### **Team Member Tasks**

#### Célie:

- Slides: Introduction, Person, Relationships
- ER Diagram: Person, Works on
- Write up: Person, Works on
- Other: Organized team meetings, made various edits/updates/corrections

#### Sarah:

- Slides: Episode, Transcript, and Why
- ER Diagram: (with Reihaneh) Episode, Viewers, Character, Views, and Plays (all together) Transcript.
- Write up: (entities) Episode and Transcript (relationships) Has and Says
- Other: Oral presentation

#### Reihaneh:

- Slides: Character, and Viewers
- ER Diagram: (with Sarah) Episode, Viewers, Character, Views, and Plays (all together) Transcript.
- Write up: (entities) Character and Viewers (relationships) Plays and Views
- Other: Came up with the creative idea to have Viewers as an entity

All: Collaborated together during multiple team meetings