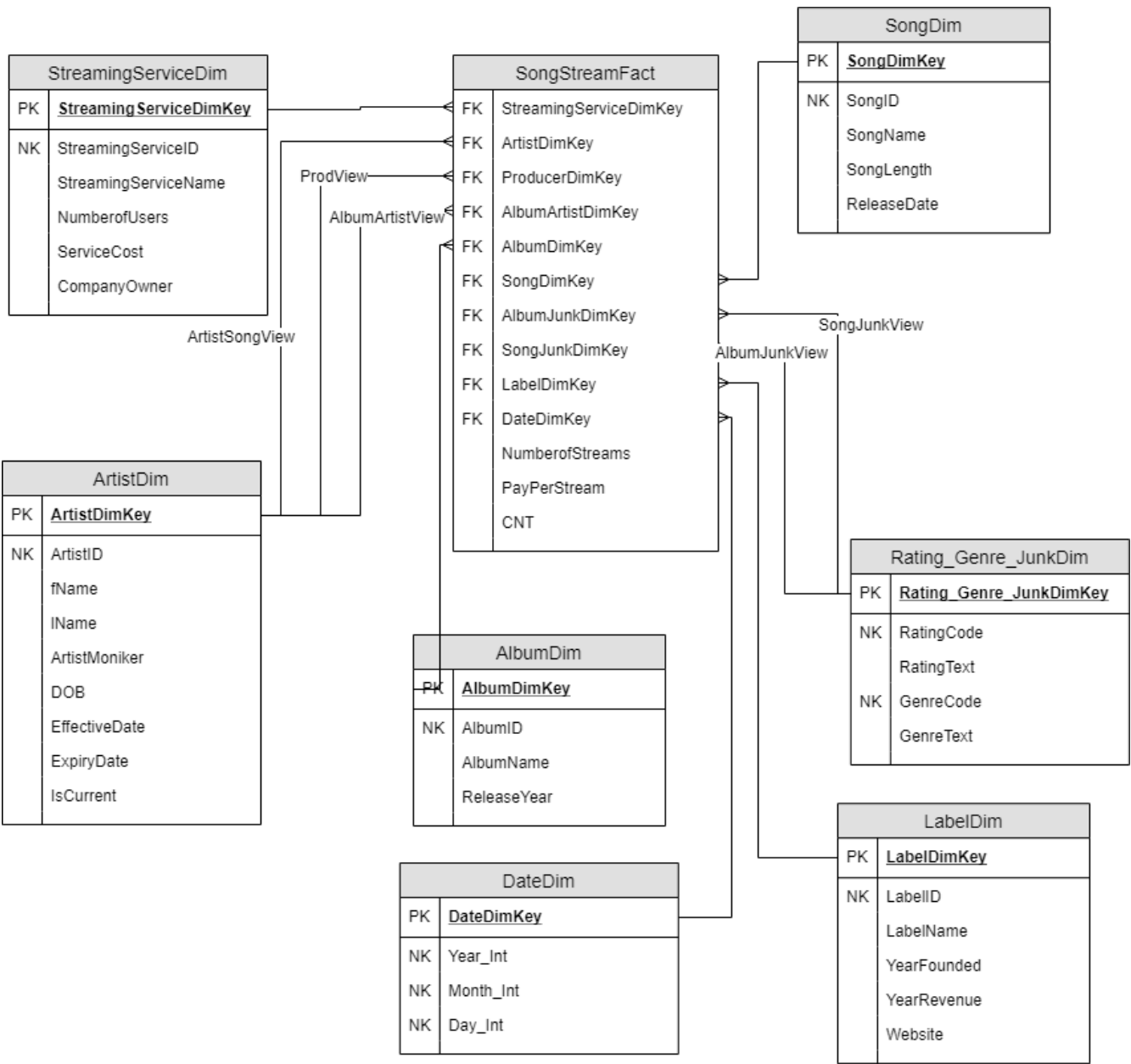


HW #1 Solution

OLAP Design



Granularity: Song Stream by Day

Dimensional History:

- Type 0:
  - DateDim
- Type 1:
  - LabelDim
  - Rating\_Genre\_JunkDim
  - SongDim
  - AlbumDim
  - StreamingServiceDim (could potentially be done as a type 2)
- Type 2:
  - ArtistDim

SQL Statements:

#### 1) The Number of Streams By Genre

```
SELECT sjv.GenreText, sum(NumberofStreams) as num_of_streams
FROM SongJunkView sjv inner join SongStreamFact ssf
    on sjv.rating_genre_junkdimkey = ssf.songjunkdimkey
GROUP BY sjv.GenreText
```

#### 2) Total Number of Streams by an artist in a given month (assume month 7 of year 2019)

```
SELECT asv.lname, asv.fname, sum(ssf.CNT) as StreamTotal
FROM ArtistSongView asv
INNER JOIN SongStreamFact ssf
    ON asv.ArtistDimKey = ssf.ArtistDimKey
INNER JOIN DateDim dd
    ON ssf.DateDimKey = dd.DateDimKey
WHERE dd.Year_Int = 2019 and dd.Month_Int = 7
GROUP BY asv.lname, asv.fname
ORDER BY StreamTotal
```