

Phase 19 Demo : Finite Set Types

Example 1 : F (finite sets)

$F\ X$ denotes all finite subsets of X :

$[SongIdAD, UserIdAD]$

$$\left| \begin{array}{l} songsAD : F\ SongIdAD \\ usersAD : F\ UserIdAD \end{array} \right.$$

Example 2 : F1 (non - empty finite sets)

$F1\ X$ denotes all non-empty finite subsets of X :

$$\left| \quad activeUsers : F_1\ UserIdAD \right.$$

Example 3 : Combined with function types

Using F and $F1$ with partial functions:

$[PlaylistId, Playlist]$

$$\left| \begin{array}{l} playlists : PlaylistId \rightarrow\ Playlist \\ playlistOwner : PlaylistId \rightarrow\ UserIdAD \\ playlistSubscribers : PlaylistId \rightarrow\ F_1\ UserIdAD \end{array} \right.$$