

Phase 19 Demo : Finite Set Types

Example 1 : F (finite sets)

$F X$ denotes all finite subsets of X :

$[SongIdAD, UserIdAD]$

| $songsAD : \mathbb{F} SongIdAD$
| $usersAD : \mathbb{F} UserIdAD$

Example 2 : F1 (non - empty finite sets)

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

| $activeUsers : \mathbb{F}_1 UserIdAD$

Example 3 : Combined with function types

Using F and F1 with partial functions:

$[PlaylistId, Playlist]$

| $playlists : PlaylistId \rightarrowtail Playlist$
| $playlistOwner : PlaylistId \rightarrowtail UserIdAD$
| $playlistSubscribers : PlaylistId \rightarrowtail \mathbb{F}_1 UserIdAD$