Università
della
Svizzera
italiana

**Facoltà
di scienze
informatiche**

Web Atelier
Prof. Cesare Pautasso
Masiar Babazadeh
Vincenzo Ferme
Andrea Gallidabino
Vasileios Triglianos

Assignment 6 - Favorite Albums

Users can mark their Favorite Albums by clicking on a checkbox associated with them in the Albums view. The favorite state of the Album is saved persistently in the database right after the user changes it (checked = favorite or unchecked = not favorite) without any refresh of the page.
Add a filtering option to the albums view so that only the favorite albums are shown.

Assignment 7 - Playback Counter

Every time a track is played some counters associated with it are incremented.
The counters are incremented (and persisted to the server) at different times:

- when the track playback begins (**count_start**)
- the first time the track currentTime passes 50% of the track duration (**count_middle**)
- when the track playback ends completely (**count_end**)

The view of the track list should be extended with three fields showing how popular is each track and the user should be able to sort the tracks according to each counters.

Assignment 8 - Reordering Playlist Tracks

Within each playlist, users can use drag and drop to change the order of tracks in their playlists.
The order of a track in a playlist should be thus persisted in the server after any change and used to sort the tracks every time the playlist is displayed.
When the playlist is played, the player should follow the order specified by the user to go to the next track when the current one has finished playing.

Assignment 9 - User Activity Log

Add an array of activities in the user schema.
These activities log the UI interactions of the user and include the following:

- timestamp of the event (**timestamp**)
- UI action performed by the user (**action**)
- target object of the action (**target**)

Whenever the user performs an action on the UI, you should add the corresponding entry into its activities array, which should grow indefinitely.
Add a main menu entry to show the Activity view, which lists the last 25 items of the user activity log, sorted so that the most recent ones are shown first.
When the user clicks on the activity, the UI should navigate to the corresponding target object
Here are the actions you should track and their corresponding target object:

- track playback (play, track URL)
- create new playlist (create_playlist, playlist URL)
- delete track (delete_track, no target object)

Università
della
Svizzera
italiana

**Facoltà
di scienze
informatiche**

Web Atelier
Prof. Cesare Pautasso
Masiar Babazadeh
Vincenzo Ferme
Andrea Gallidabino
Vasileios Triglianos

Assignment 10 – Player Remote Control

Synchronize the player on every connected Web browser.

When the user selects a song and starts playing it in one browser, the other connected browsers should start playing the same song.
When the user stops playing the song in one browser, the other browsers should also stop.
When the user skips and seeks to another position in the current song, the other browsers should also skip to the same position.

The player in all browsers should also show the number of connected browsers. This counter is increased when a new browser connects and decremented when the browser disconnects.

The connected state of the player should be controlled with a checkbox. When checked, the player can control (and be controlled from) other players, when unchecked the player runs stand-alone.

Note: whenever a newly connected browser joins, its state is not affected. However, the next time some other browser changes the state of the player, the newly connected browser will begin synchronizing its state. Or, if the new browser starts playing a song, to the other browsers will synchronize with it.