



Darryl & Netflix next steps homework

Igor Okulist <iokulist@netflix.com> To: Darryl Alvares <darryl.alvares@gmail.com>

Fri, Feb 9, 2018 at 11:51 AM

Hi Darryl,

Apologies for the delay -- see response inline.

Thanks, Igor

On Thu, Feb 8, 2018 at 11:22 PM, Darryl Alvares darryl.alvares@gmail.com wrote: Hi Igor,

Just sending you a reminder.

Can you please help answer some of my queries below?

Thanks & Regards, Darryl Alvares

On Wed, Feb 7, 2018 at 9:42 PM, Darryl Alvares darryl.alvares@gmail.com wrote: Just made a few corrections to previous email below.

Thanks & Regards, Darryl Alvares

On Wed, Feb 7, 2018 at 7:38 PM, Darryl Alvares darryl.alvares@gmail.com wrote: Hi Igor,

I have a few followup queries. Please find them below.

Below I have documented what i have understood.

- The large file will contain Content List which has a list of content elements and preroll list which contains preroll elements.
- The content elements will refer to 0 or more pre-roll elements.
- The content elements will contain metadata information of the actual video file (contains certain attributes of a video file required for play list)
- The pre-roll elements will contain metadata information of the actual video file (contains certain attributes of a video file required for play list)
- · Given a input as content name and country code we need to return list of valid playlists for that content
- Content name uniquely identifies a content element
- Preroll name uniquely identifies a Preroll element

Questions:

- 1. Video name uniquely identifies a Video ?? can we assume the video name is unique throughout the large file and not just unique to the content\preroll element?
 - a. If above statement is true then ignore the below point b

IO: Assume i	names(s)	are	unique	throug	hout	the	file

- a. If the above statement is false then can i assume the video element in content\pre-roll can be uniquely identified using the combination of video\preroll name and content name?
- 1. What is the size of the large file is it in KB, MB or GB?
 - a. Reason for Query: If the file size is in mega bytes or gigabytes then loading the whole file to memory and mapping to java beans using Jackson library wont scale. I will need to parse the file token by token using jackson and then load that data into a datastore.
- IO: Assume jackson can parse the file, but there will be large number of entries. Assume your datastructure will fit into RAM
- a. Also what is the frequency of processing the large file? is it a daily/hourly extract? IO: you can pick either one
 - 1. Does the content element contain the actual video file or just the metadata of the actual video

IO: only metadata

- 1. If the file contains unknown elements/attributes we just ignore those attributes correct? IO: ok to ignore others
 - 1. If some mandatory attribute say like countries is missing then we just ignore that whole video element from processing and continue to the next video element if one exists. Also similar is the logic for all elements.
- IO: assume all required attributes are present
- 1. Are the content/preroll elements unique in the large file or can there be duplicates names? IO: Assume names(s) are unique throughout the file
 - 1. Copy pasted a requirement text as follows "The included videos for content and all defined pre-rolls will all have matching attributes (at least one country and language in common and the same aspect ratio) to form a legal play sequence"
 - a. Query: If for a content (C1) there are 2 preroll's(P1,P2) referred by it and say preroll P1 does not have a compatible matching video file for UK country do we return a message like "no playlist possible..." if a play list is requested for content C1 for country UK?

10: I think this is example 1. when we it shows "(No legal playlist possible because the Pre-Roll Video isn't compatible with the aspect ratio of the Content Video for the US) "Let me know if you meant something else.

- 1. Can I assume the output format to be a list of playlist of videos placed in the order in which it needs to be run?
 - a. Eg [[V1,V2], [V5,V8]] instead of outputting playlist 1 { V1,V2}, playlist 2 {V5,V8}

IO: either one is fine

[Quoted text hidden]