

Technical Test

User Story 911

<Creative Agency User> want <to create a new show reel from a collection of clips> in order to <present my agency commercials to the advertiser>

Background

- A show reel has name, video standard, video definition and total duration expressed as timecode (hh:mm:ss:ff)
- Video standard is either PAL or NTSC
- Video definition is SD or HD
- A show reel can have 1 or more video clips
- A video clip has a name, description, video standard, video definition, start timecode and end timecode
- A timecode is expressed as HH:MM:ss:ff
 - HH > hours
 - MM > minutes
 - ss > seconds
 - ff > frames
 - PAL video has 25 fps (25 frames per second) i.e. 1 frame is 40 milliseconds
 - NTSC video has 30 fps

Requirements

1. Create a proof of concept user interface for the customer
2. The UI should show the complete duration of all the clips in the show reel
3. The UI should allow me to give my show reel a name.
4. The UI should allow me to add and remove clips from a list. This should update the total duration
5. One can not mix video standards and video definitions in a video reel. i.e. NTSC clip cannot be added to PAL video reel. HD clip could not be added to a SD video reel.

Technical Notes

Development time is 4 hours.

Please select language(s) / framework(s) of your choice.

The generic functions created will be used by other applications. Please ensure that there is enough abstraction. i.e. Timecode class can be used in another project.

We are looking at code quality and thought process, we would prefer an unfinished solution with quality code compared to a complete application with rushed code.

Data

- Clip1
 - Name: Bud Light
 - Description: A factory is working on the new Bud Light Platinum.
 - Standard: PAL



- Definition: SD
 - Start timecode: 00:00:00:00
 - End timecode: 00:00:30:12
- Clip2
 - Name: M&M's
 - Description: At a party, a brown shelled M&M is mistaken for being naked. As a result, the red M&M tears off its skin and dances to "Sexy and I Know It" by LMFAO.
 - Standard: NTSC
 - Definition: SD
 - Start timecode: 00:00:00:00
 - End timecode: 00:00:15:27
- Clip3
 - Name: Audi
 - Description: A group of vampires are having a party in the woods. The vampire in charge of drinks (blood types) arrives in his Audi. The bright lights of the car kills all of the vampires, with him wondering where everyone went afterwards.
 - Standard: PAL
 - Definition: SD
 - Start timecode: 00:00:00:00
 - End timecode: 00:01:30:00
- Clip4
 - Name: Chrysler
 - Description: Clint Eastwood recounts how the automotive industry survived the Great Recession.
 - Standard: PAL
 - Definition: SD
 - Start timecode: 00:00:00:00
 - End timecode: 00:00:10:14
- Clip5
 - Name: Fiat
 - Description: A man walks through a street to discover a beautiful woman (Catrinel Menghia) standing on a parking space, who proceeds to approach and seduce him, when successfully doing so he then discovers he was about to kiss a Fiat 500 Abarth.
 - Standard NTSC
 - Definition: SD
 - Start timecode: 00:00:00:00
 - End timecode: 00:00:18:11
- Clip6
 - Name: Pepsi
 - Description: People in the Middles Ages try to entertain their king (Elton John) for a Pepsi. While the first person fails, a mysterious person (Season 1 X Factor winner



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Melanie Amaro) wins the Pepsi by singing Aretha Franklin's "Respect"." After she wins, she overthrows the king and gives Pepsi to all the town.

- Standard: NTSC
- Definition: SD
- Start timecode: 00:00:00:00
- End timecode: 00:00:20:00
- Clip7
 - Name: Best Buy
 - Description: An ad featuring the creators of the camera phone, Siri, and the first text message. The creators of Words with Friends also appear parodying the incident involving Alec Baldwin playing the game on an airplane.
 - Standard: PAL
 - Definition: HD
 - Start timecode: 00:00:00:00
 - End timecode: 00:00:10:05
- Clip8
 - Name: Captain America The First Avenger
 - Description: Video Promo
 - Standard: PAL
 - Definition: HD
 - Start timecode: 00:00:00:00
 - End timecode: 00:00:20:10
- Clip9
 - Name: Volkswagen "Black Beetle"
 - Description: A computer generated black beetle runs fast, as it is referencing the new Volkswagen model.
 - Standard: NTSC
 - Definition: HD
 - Start timecode: 00:00:00:00
 - End timecode: 00:00:30:00

Acceptance Tests

1	Given I navigate to the user interface and create a PAL SD Video Reel When I try and add NTSC SD video clip Then user interface should prevent me from doing this action	
2	Given I navigate to the user interface and create a PAL SD Video Reel When I try and add PAL HD video clip Then user interface should prevent me from doing this action	
3	Given I navigate to the user interface and create a PAL SD Video Reel When I add all the PAL SD video clips Then the total duration displayed is 00:02:11:01	
4	Given I navigate to the user interface and create a NTSC SD Video Reel When I add all the NTSC SD video clips Then the total duration displayed is 00:00:54:08	