Dreams / Front-end engineering take-home project
July 2019

Don't spend more than 4 hours on this project — we know you have many other things to do.

It's totally ok if you don't finish everything. Do as much as you can and tell us what you would do next.

Objective
Develop a mock UI for a video player that lets viewers discover & click on chapter markers
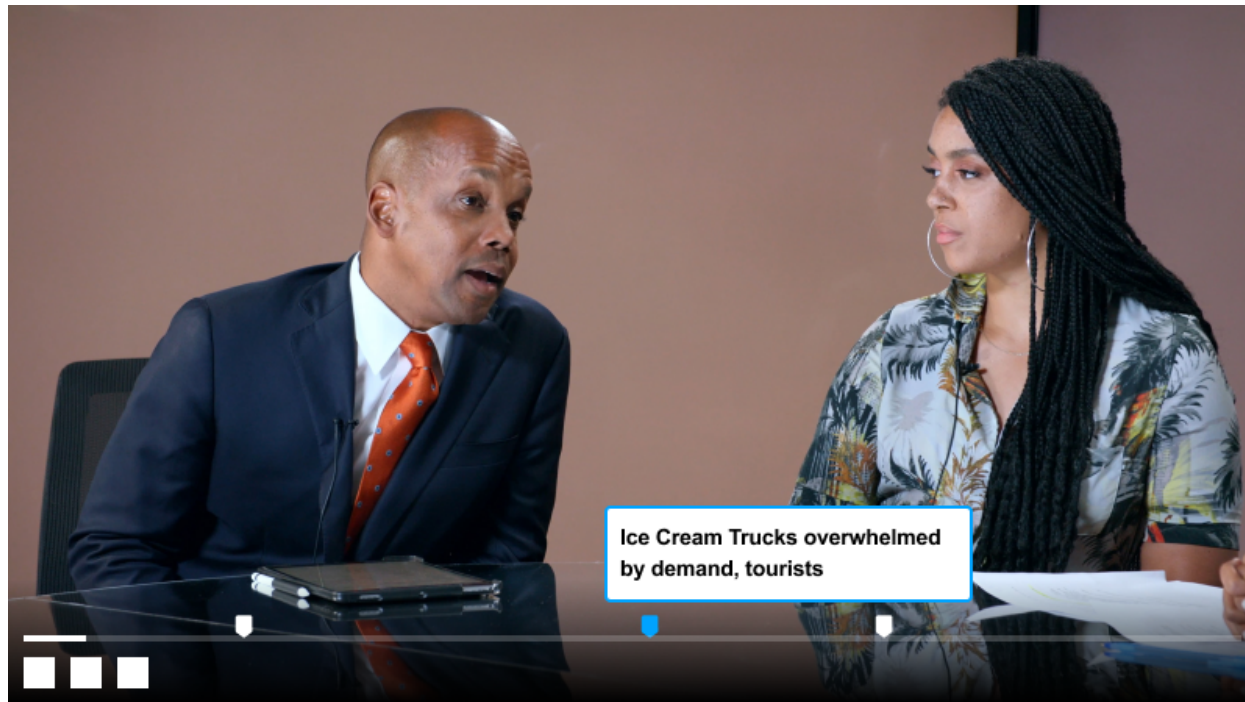
Default player state (not hovered)

Hovered player state

First marker is hovered

Second marker is hovered

[All screenshots here](#)

Requirements

Assume an HTML page contains the following tag:

```
<div id="player">
    <video id="video"></video>
</div>
```

… and the following Javascript code:

```
<script>
    const container = document.getElementById('player');
    const videoInfo = {
        duration: 547, // total duration of video, expressed in seconds
        markers: [
            {id: 'j3kk929c', timecode: 124, label: 'Heatwave in New York City'}, // timecode expressed in seconds
            {id: 'ck39r8c2', timecode: 267, label: 'Ice Cream Trucks overwhelmed by demand, tourists'},
            {id: 'q9815779', timecode: 349, label: 'Mayor escapes to Alaska, citing campaign commitments'}
        ]
    }
    // TODO: initialize player with chapter markers
</script>
```

- Your code should programmatically add all necessary UI elements to the player UI and place the markers.

- Add any necessary CSS to style the page & components appropriately

- The "video" should shrink/grow when the browser resizes:

    - minimum-width = 800px

    - maximum width = 1380px

- Progress bar:

    - The total progress bar should fill the width of the video minus 10px of padding on each side

    - A second bar should represent the "playhead," i.e. the current playback timecode of the video

- All UI elements should reposition when the player changes size

- Feel free to use any Javascript client libraries you like, or none at all.

Interactivity

- The player UI should only show when it's hovered

- The markers should reveal their label when hovered; they should be able to capture a click event.

Simplifications

- No video playback is required; instead of a <video> tag, simply use a statically loaded <img> or rectangular <div> with an aspect ratio of 16:9

- No need to implement player controls (play/pause/etc); simply create 3 mock UI elements (3x 20px white squares)

Assets

- We used this label icon for the marker

- The font is sans-serif, size: 14px, line height: 20px, bold

- The blue highlight color is #00A3FF