Javascript Developer Assignment Questions

Frame Player

You are expected to write a player which shows frames of a video at desired rate.

- You will be provided 7 images.
- Each image is 640x360 and has 25 frames packaged in it.

Requirements

- Frames must be rendered on Image Area at 10 fps
- Clicking on the Image Area must toggle the pause/play state of the player.
- Progress Bar must be updated while playing.
- Clicking on the Progress Bar must pause the player and seek to the clicked position.
- Create a frame-player.js file and implement the FramePlayer class in it.
- Create frame-player.html put a player container div in it and initialize frame player from the container.
- Register all frame player events (see events section) in frame-player.html.
- frame-player.js and frame-player.html files must be compressed and delivered as name-surname-frame-player**.zip**

Serving Files

Images and other necessary player files must be served statically. Create a shell script with the name ‘serve.sh’ that starts your web server by running it. You are allowed to use open source npm packages (like serve or http-server) only for this purpose but it is a plus if you implement your own server with nodejs.

Example:
./serve.sh 3000

The above command needs to start the server that listens to the port 3000. When you open ‘http://localhost:3000’ url in your browser, you should be able to see the player page.

Constructor & Methods

You have to package this player as a library in a single javascript file.

FramePlayer class must have a constructor that takes the id of the html element as a parameter and 2 public methods named play and pause.

Library usage must be in following form

```
var player = new FramePlayer(<idOfTheContainerDivElement>);
player.play();
player.pause();
player.on(<eventName>, <callback>);
```

Events

This class must fire following events when corresponding conditions are matched.

1) **ondownloadcomplete**

   This event must be fired when all images are downloaded. Callback function takes one parameter which holds the download completion time in milliseconds.

   Sample Usage:

   ```
   var player = new FramePlayer("#idOfHtmlElement");

   player.on(‘downloadcomplete’, function(ms) {
           console.log('download completed in ' + ms);
   ```

```
});
```

2) onplay

This event must be fired when video is played. Calback function takes one parameter which is the play time in milisecond

Sample Usage:

```
var player = new FramePlayer("#idOfHtmlElement");
player.on('play', function(ms) {
        console.log('video is playing now');
});
```

3) onpause

This event must be fired when video is paused. Callback function takes one parameted which is the pause time in milisecond

Sample Usage:

```
var player = new FramePlayer("#idOfHtmlElement");

player.on('pause', function(ms) {
        console.log('video is paused');
});
```

2) onend

This event must be fired when the player reaches the end. Callback function takes zero parameters.

Sample Usage:

```
var player = new FramePlayer("#idOfHtmlElement");

player.on('end', function() {
        console.log('video is completed');
});
```

Evaluation

- 3rd party libraries (including jQuery) are not allowed.
- Images should be downloaded from a given url in the code, do not download and embed images into the project.
- Code should be simple & clear. Indentation and naming consistency is important.
- Good looking UI is a big plus.