

Problem 3:Video player

Pseudocode:

This program will allow the user to select and play their desired video on a webpage with play, pause, rewind and forward functionalities.

1. Select desired file from the select dropdown
2. The file will start upon selecting.
3. To pause or play again

```
function playVideo( ){
```

The file which is currently playing is passed on from the select list along with the media location. Using the HTMLVideoElement API it tests for browser support and checks state of the file. If file is being played, button text is toggled to "Pause" and vice versa. Depending on the "Play" or "Pause" state of the file, media can be paused or played

```
}
```

4. To Rewind 10 Seconds

```
function rewindVideo( ){
```

Using HTMLVideoElement API, state and compatibility check on the file currently playing is done and using the currentTime attribute, 10 seconds are subtracted from currentTime on each call.

```
}
```

5. To Forward 10 seconds

```
function forwardVideo( ){
```

Using HTMLVideoElement API, state and compatibility check on the file currently playing is done and using the currentTime attribute, 10 seconds are added to currentTime on each call.

```
}
```

Design Pattern:

The design pattern I have used here is similar to Visitor Pattern. Since we are modifying some attributes only as per user's requirement without actually changing the main object entirely. And we are using calls to various functions which are maintaining the new functionalities.

