

Backend (FastAPI):

Implement a REST API that wraps a class `MediaPlayer`.

`MediaPlayer` should:

- Load a local video file.

- Before displaying each frame, overlay the current timestamp (top-left corner).

- Display the video locally on the main process (using OpenCV).

- Allow controlling the **playback speed**: 0.5x, 1x (default), 2x, 4x.

Expose API utils:

- `play video` (optionally with speed parameter)

- `stop video`

- `reset video`

- `set speed`

Frontend (React):

Create a simple UI with buttons to call the API utils (`play`, `stop`, `reset`, `set speed`).

Only controls are exposed; video is **not streamed** to frontend.

Config:

All IP/port values (for both REST API and frontend) must be driven from one shared config file.

General:

No database.

Add a README with:

- Requirements

- Installation steps

- How to run backend and frontend

Time Expectation:

The task should take **3–4 hours**.

Submission:

Push backend and frontend to a GitHub repository.

Share the repository link.