# Auto-create demo video



I have a React app.

How to auto-create demo video? I can mention which buttons to click and what to enter.

Got it <u>4</u> You want to **auto-generate a demo video of your React app**, where instead of manually screen-recording, you just describe interactions (like "click this button" or "type this text"), and it produces a polished video.

There are a few approaches you can take:

## Option 1: Scripted Browser Automation + Screen Recording

- 1. Use **Playwright** or **Puppeteer** to script interactions with your React app:
  - Click buttons, type in fields, navigate, etc.
  - Example:

```
// demo.js
const { chromium } = require('playwright');

(async () => {
    const browser = await chromium.launch();
    const context = await browser.newContext({
        recordVideo: { dir: 'videos/', size: { width: 1280, height: 720 } } });
    const page = await context.newPage();

await page.goto('http://localhost:3000');

// Example actions
    await page.click('#login-btn');
    await page.fill('#username', 'demoUser');
    await page.fill('#password', 'secret123');
    await page.click('#submit');

await page.waitForTimeout(3000); // wait so video captures result

await browser.close();
})();
```

This auto-generates a video (videos/demo.mp4).

## Option 2: Script to Storyboard → Video

• You define a script/DSL like:

```
yaml
steps:
- goto: "http://localhost:3000"
```



```
- click: "#login-btn"
- type: { selector: "#username", text: "demoUser" }
- type: { selector: "#password", text: "secret123" }
- click: "#submit"
```

• Then a small Node.js tool reads this and runs Playwright/Puppeteer to record.

### **Option 3: Use Browser Recording Plugins**

• Tools like Replay.io , Loom API , or Screenity let you programmatically capture sessions, but they're more manual. If you want automation, Playwright's built-in video capture is better.

## Option 4: Add Narration/Text Overlays

- After Playwright records the raw video:
  - Use **FFmpeq** to overlay captions like "Clicking Login button".
  - Or automatically add voice narration using text-to-speech (TTS) (e.g., Google Cloud TTS or AWS Polly).
- 🔑 The most automated and polished approach is:
- 1. Write interactions in a YAML/JSON "script".
- 2. Run Playwright  $\rightarrow$  record video.
- 3. (Optional) Post-process with FFmpeg  $\rightarrow$  captions + TTS narration.

for Do you want me to draft a ready-to-run template where you just list the steps (like "click X, type Y"), and it spits out a video automatically?



Any npm packages to implement Option 2: Script to Storyboard  $\rightarrow$  Video?

Yes — there are several npm packages / services that can help with implementing **Option 2: Script**  $\rightarrow$ can mix & match. Here are some good ones + ideas how to put them together.

## 🔍 Useful npm packages / services

| Package / Service   | What it does / Pros   | What you'll need to build or integrate to<br>use for your "scripted storyboard →<br>video" flow  |
|---------------------|---|--|
| @puppeteer/recorder | Records user interactions in Chrome<br>/ Chromium (via Recorder) and<br>produces a Puppeteer script. GitHub | You can use this to capture the steps of the flow (click, type etc.) into a script that you can run. But doesn't itself record video output; you'd combine it with a video |



| Package / Service                     | What it does / Pros   | What you'll need to build or integrate to<br>use for your "scripted storyboard →<br>video" flow   |
|---------------------------------------|---|---|
|                                       |   | recorder step (e.g. Puppeteer + a screen recorder) to get visuals.  |
| puppeteer-screen-<br>recorder         | Allows recording the browser screen during a Puppeteer session. Can record actions etc. npm   | If you replay the script (from recorder or handcrafted), then wrap in <b>puppeteer-screen-recorder</b> (or Puppeteer's built-in video/capture API) to generate the video.  Might need to install FFmpeg etc depending on formats. |
| puppeteer-video-<br>recorder          | A simpler video capture plugin for<br>Puppeteer. npm  | Same: plays well when you have scripted automation. Might lack advanced editing (overlay, transitions etc.).  |
| @airnub/puppeteer-<br>remote-recorder | Captures screen (video) and audio,<br>works over remote Puppeteer<br>connections. npm   | Helpful if your demo setup is remote or distributed; you still need to feed in the script of interactions.  |
| Shotstack (via<br>shotstack-sdk)      | A cloud video editing API + SDK. Combine images/video/text/assets via JSON → rendered video with transitions, overlays etc. Shotstack+2 | Could use this to <i>post-process</i> or build polished video: e.g. your recorded video clips + overlays/text/titles, or even to stitch together snapshots/screenshots rather than full video, depending on your approach.        |
| ffcreator                             | Node.js library to build/compose<br>short videos with<br>pictures/videos/audio etc. npm   | Good for simple edits, combining clips,<br>adding music, transitions. But less about<br>automating browser interactions; more<br>about processing & composing assets after<br>capture.  |

# How to build a flow using these

Here's a sketch of how you might combine the tools above into a workable "Script  $\rightarrow$  Storyboard  $\rightarrow$ Video" pipeline:

1. **Define a script / DSL** — e.g., JSON or YAML that describes steps like:

```
yaml
    teps:
    goto: "/login"
    click: "#username-field"
    type: "#username-field", "demoUser"
    type: "#password-field", "password123"
    click: "#submit-button"
    wait: 2000
steps:
     - wait: 2000
     - screenshot: "#dashboard"
```

- 2. **Generate an automation runner** Use Puppeteer to read that script and execute it. You can even auto-generate the Puppeteer code from the script, or directly interpret.
- 3. Record visuals:
  - Use **puppeteer-screen-recorder** (or similar) to capture video of the browser during the run.

• Optionally, also take screenshots at key steps (for "storyboard style" visuals), or capture browser logs.

### 4. Post-process / edit:

- If you want overlays (labels like "User clicks login") or highlight effects, you can use FFmpeq (scripted) or libraries like ffcreator.
- For more polished editing (transitions, smooth cuts, title screens), you might send the video + assets to a service like **Shotstack** via their SDK.

## 5. Optional narration / captions:

- Either generate captions based on the script automatically.
- Use a TTS library or service (Google Cloud TTS, AWS Polly etc) to generate voice-over.
- Merge audio + video using FFmpeg or via video editor API.

### 6. Final rendering & output:

- Export MP4 (or whatever format).
- Possibly compress or process for different resolutions.

## 🚹 Caveats / Things to watch out for

- Synchronisation / timing: script steps vs what shows up on screen (network delays, animations etc). You'll probably need waits or steps to assert content loaded before moving on.
- Performance & video quality: screen recording can consume CPU and produce large files. Need to pick frame rate, quality etc.
- Audio capture: many browser automation tools do NOT capture audio by default. If you want sound (narration, UI sounds), you'll need extra setup.
- Cost / limits: services like Shotstack have quotas or costs. If many videos or high resolution, cost adds up.

If you want, I can put together a **starter npm package / boilerplate** (or pick a combination of above) so you can drop in your text script + receive the demo video automatically. Do you want me to prepare that?