For this project, I took a video and converted it into three different resolutions—240p, 360p, and 720p—using FFmpeg, then split each version into small 2-second segments for smooth streaming. I created playlists for each resolution along with a master playlist that ties them all together. After uploading all these files to GitHub and hosting them on GitHub Pages, I built a simple web page that plays the video using HLS, so it automatically adjusts the quality based on the viewer’s internet speed and device. This way, the video streams smoothly and efficiently in any modern browser.