

Faculty of Engineering and Technology Department of Electrical and Computer Engineering First Semester 2020/2021 Course Project

In this project you will stream a stored video using HTTP protocol. To complete the project do the following:

- 1. Download a video from the internet or use any other sources to get a video,
- 2. Setup a webserver server on the server using docker containers,
- 3. Create a Hello webpage (blank webpage with Hello text) on the server,
- 4. Use port forwarding on the server (docker container) and in the ssh command to test the server and view the Hello webpage locally (at localhost or 127.0.0.1),
- 5. Use ffmpeg to process the downloaded video to generate videos with different qualities,
- 6. Use ffmpeg to process the downloaded video to generate videos with different resolutions,
- 7. Use the MP4Box software tool to produce DASH compatible video stream; manifest (.mpd) and video files (.m4s) and store these files in the root directory of the webserver,
- 8. Create a blank webpage and add the JavaScript player as shown in the lecture slides,
- 9. Use any internet browser to view the webpage locally and play the video.

Project discussion will be on Monday 11/1/2021 and Wednesday, 13/1/2021. Exact time slots will be decided later. No report is required. Work individually.