

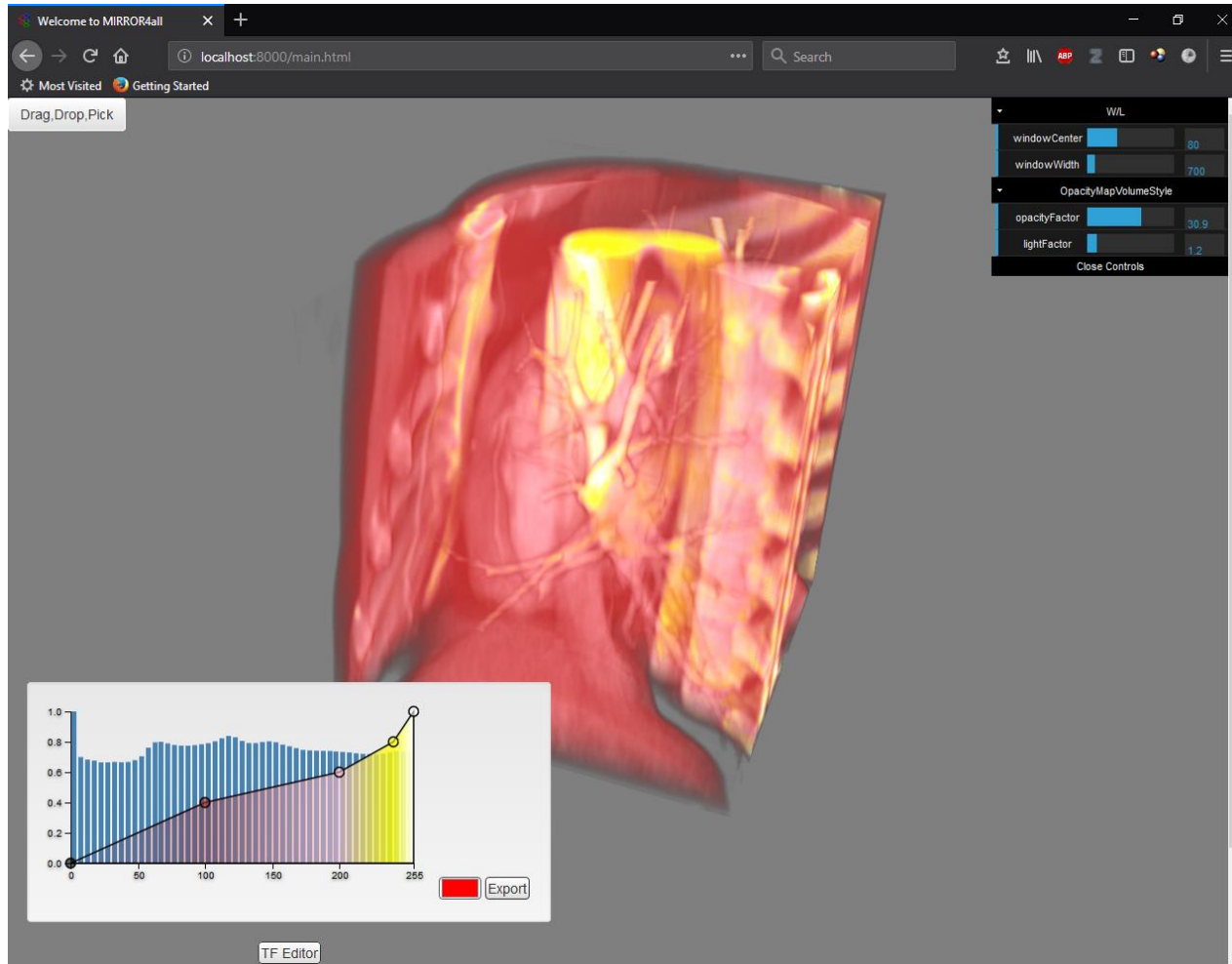
# Mirror4all

DICOM medical volume data  
visualization

# Medical volume data visualization

- DICOM is the defacto file format for medical imaging
  - Medical images often have high dynamic range (8-16 bits)
    - 3D Visualization is typically limited to 8-bit
    - Windowing is used to reduce range
  - Mainly distributed as a series of DICOM files and most often visualized with 2D viewers.
- How could X3D enhance DICOM imaging visualization?

# Demo – Mirror4all



- X3D can be used to share the visualization of medical volume data through the web
- Is there a use case for supporting this capability in “patient-portal” web applications, what is required to make this happen: open source or proprietary solutions?

# Multi Planar Reconstruction

- To what extent should the end-user be able to explore and interact with the image data?
  - Reconstruct an arbitrary plane through the volume data?
    - 3D base visualization of the MPR plane
    - Real-time reconstruction