Unit 4

Computing Infrastructure and Networks

This week's consideration focused on connecting the emerging trends identified through computer networks.
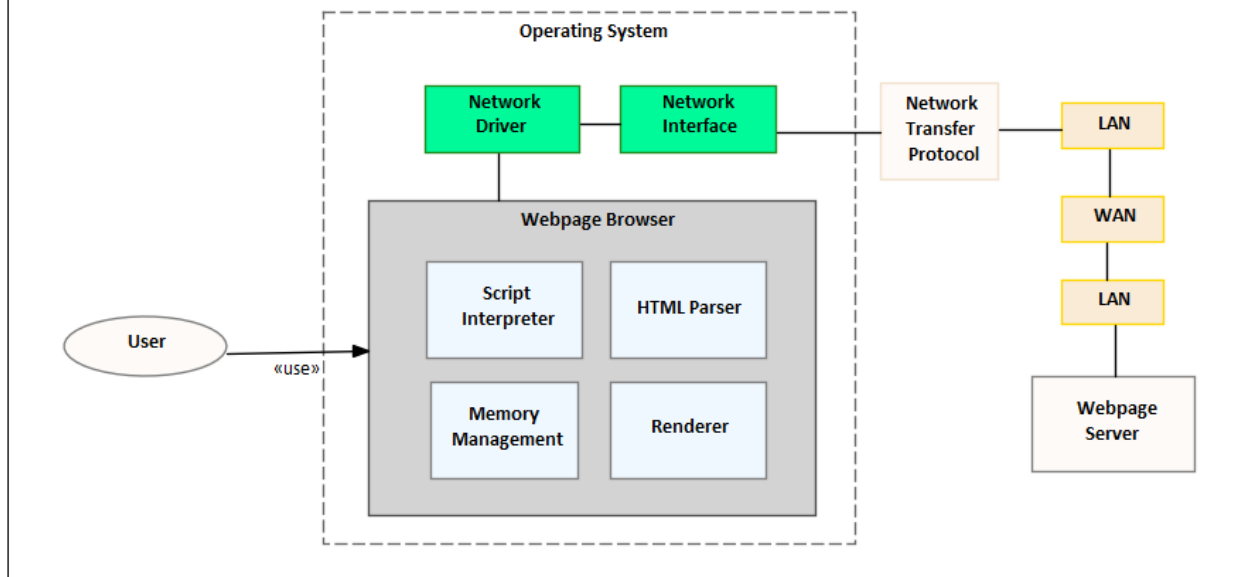
General thoughts about this unit

This unit was a beneficial introduction to the concept of **network topologies** and how various types of networks connect to each other. Prior to this unit, I had a basic understanding of a LAN, however this unit broadened understanding to include other network layouts never heard of before, for example Metropolitan Area Network (MAN).

- Internet vs Intranet
- Network topologies

Website Functionality

Looking at a general website browser, I investigated the functionality provided by such a browser to serve a webpage.

Basic Process Flow to load a Webpage

1. User enters a specific web page address into the browser's address bar.
2. Browser sends TCP request to DNS server.
3. DNS server resolves address to WAN address.
4. Browser's request redirected to the resolved address.
5. Web server receives request.
6. Web server loads content and formats data as HTML format.
7. Web server sends data over the network back to the receiving Browser.
8. Browser receives HTML data.
9. Browser runs security checks on the received data.
10. Browser parses the HTML data to ensure it conforms to standard.
11. Browser builds relevant display "tree" for each element.