## **Transcript of Presentation**

Shanchuan Wu 27723046 sw9n14@soton.ac.uk

Emyr Al Kautsar 28117301 eak2g15@soton.ac.uk

Today we will explain the architecture of world wide web. Besides, we will focus on its applications, impacts and future.

Before talking about the architecture, we need to know that the world wide web was invented by Tim Berners-Lee in 1989. He introduced the architecture of world wide web in his paper. So, if you want to know more detailed things or technical things, you can have access to this paper by clicking here.

The world wide web can be divided into three parts: Identification (Document Naming Scheme), Representation (Document Formats) and Interaction (Network Protocols). In order to provide access from different platforms. Tim Berners-Lee introduced the client-server model. In this model, clients can be smartphones tablets and computers. Specifically, they are browsers in different platforms, like safari, chrome and IE. Clients are used to resolve the unique address into a document. And the unique address is an URI, which will be explained later. By contrast, servers are used to store the documents in common formats. So, we can consider servers as warehouses. Network protocols like rules, they tell us how the documents can be transferred through the Internet. (client-sever model, clients, servers, protocols)

As we explained just now, documents have their unique addresses. The unique address is an URI (Uniform Resource Locations). The URIs consist of URLs and URNs. And most people are familiar with URLs, because they normally are known as the website addresses, like <a href="www.google.uk">www.google.uk</a>. (URIs, comparison, domain name, IP address)

Besides, the world wide web offers common document formats and network protocols. And the most common format is HTML. it consists of lot of different tags. By using these tags, we can specify which parts of text are headings, paragraphs and so on. HTTP is the most common network protocol in the world wide web, when people click hyperlinks, the computer will send a request to the servers. Then, HTTP will tell the computers how to fetch the documents stored in the servers. (formats, HTML, tools, protocols, HTTP, rules)

All these three parts: Identification (Document Naming Scheme), Representation (Document Formats) and Interaction (Network Protocols) make up of the world wide web and make it successful. (three parts)

When it comes to the impacts of the world wide web, we all agree that it has changed our life and society a lot. First of all, world wide web becomes a great method for people to require information and knowledge. Secondly, people gradually treat the web as a place to socialize with people. Thirdly, world wide web becomes a place where people listen to music, watch movies and play games. So, web gradually become a very important venue for people to entertain themselves. Finally, we should not ignore the importance of world wide web to business. You know there are many business websites / e-commerce in the world, like EBay.

As for the future of world wide web, we will focus on the development of techniques. Since the world wide web was introduced by Tim Burners-Lee in 1989, much progress has been made. At this point of time, we are in the 2<sup>nd</sup> generation of the World Wide Web, called Web2.0. Web 2.0 mainly focused on the ability for people to collaborate and share information online rather than the one-way broadcasting model represented by the earlier Web. It signifies a conversation between the original author of the content and all users who can participate.

Now, the researchers are working on the Web 3.0, which is also called semantic web. Web 3.0 tries to link, integrate and analyse data from various data sets to obtain new set information stream. With semantic Web it helps computer understand the meaning behind the web page, changing the web into a language that can be read and categorized by the system rather than human. Nonetheless, the main important purpose of semantic web is to make the web readable by machines not only by humans. If you are interested in the evolution of the web, you can watch this video on YouTube and know more about it. (complementary materials, videos)

Finally, if you still want to know more about it or want to know why world wide web succeed instead of other information systems, perhaps these links or videos can be helpful. Thanks. (complementary materials, videos, webpages)