**Research on the below technologies as applies to web development- The results should be presented to the Class**

**Ajax-Enabled Rich Internet Applications**

The Ajax-Enabled Rich Internet Applications is web application that is able to approximate the look, fell and usability of the desktop applications it has two key attributes which are performance and rich graphical user interface. RIA performance comes from Ajax (Asynchronous JavaScript and XML), which uses client-side scripting to make web applications more responsive. Ajax applications separate client-side user interaction and server communication, and run them in parallel, reducing the delays of server-side processing normally experienced by the user.

**2. Introduction to emerging web technologies**

1. **SOAP simple object access protocol**

SOAP (Simple Object Access Protocol) is a message protocol that allows distributed elements of an application to communicate. SOAP can be carried over a variety of lower-level protocols, including the web-related Hypertext Transfer Protocol (HTTP). SOAP defines a header structure that identifies the actions that various SOAP nodes are expected to take on the message, in addition to a payload structure for carrying information. The concept of routing a message through a string of nodes that perform different functions is how SOAP supports things like addressing, security and format-independence

1. **WSDL web services description language**

Web Services Description Language (WSDL) is a standard specification for describing networked, XML-based services. It provides a simple way for service providers to describe the basic format of requests to their systems regardless of the underlying run-time implementation.

WSDL defines an XML format for describing network services as a set of endpoints that operate on messages that contain either document-oriented or procedure-oriented information. The operations and messages are first described abstractly and then bound to a concrete network protocol and message format in order to define an endpoint. Related concrete endpoints are combined into abstract endpoints (services). WSDL is extensible to allow description of endpoints and their messages, regardless of which message formats or network protocols are used to communicate. This means that interfaces are defined abstractly using XML schema and then bound to concrete representations that are appropriate for the protocol.

1. **UDDI universal description and discovery protocol**

UDDI (Universal Description, Discovery, and Integration) is an XML-based registry for businesses worldwide to list themselves on the Internet. Its ultimate goal is to streamline online transactions by enabling companies to find one another on the Web and make their systems interoperable for e-commerce. UDDI is often compared to a telephone book's white, yellow, and green pages. The project allows businesses to list themselves by name, product, location, or the Web services they offer.