[Assignment: Research SSL](https://dmacc.blackboard.com/webapps/assignment/uploadAssignment?content_id=_2771112_1&course_id=_54007_1&group_id=&mode=view)

SSL or Secure Socket Layer is a security protocol to protect the transmission of data from the browser to the server. Many applications that process money will require a website to have an SSL Certificate.  This assignment will research and discuss how SSL works.

Research the following terms and concepts related to SSL;

1. Define and discuss the role of SSL
2. Define and discuss the role of an SSL Certificate
3. Identify three or more organizations that provide SSL certificates
4. What is required to obtain an SSL Certificate
5. Research and discuss the resources and requirements your webhost provider offers regarding SSL Certificates.  If you do not have a host provider using www.heartland-webhosting.com or www.bluehost.com or [www.godaddy.com](http://www.godaddy.com).

According to info.ssl.com A SSL (Secure Sockets Layer) is the standard security technology for establishing an encrypted link between a web server and a browser. This link ensures that all data passed between the web server and browsers remain private and integral. SSL is an industry standard and is used by millions of websites in the protection of their online transactions with their customers.

To be able to create an SSL connection a web server requires an SSL Certificate. When you choose to activate SSL on your web server you will be prompted to complete several questions about the identity of your website and your company. Your web server then creates two cryptographic keys - a Private Key and a Public Key.

n SSL Certificate will contain your domain name, your company name, your address, your city, your state and your country. It will also contain the expiration date of the Certificate and details of the Certification Authority responsible for the issuance of the Certificate. When a browser connects to a secure site it will retrieve the site's SSL Certificate and check that it has not expired, it has been issued by a Certification Authority the browser trusts, and that it is being used by the website for which it has been issued. If it fails on any one of these checks the browser will display a warning to the end user letting them know that the site is not secured by SSL.

Organizations that provide SSL certificates are Namecheap, GlobalSign, and SSL.com. To obtain an SSl certificate you must prepare by getting your server set up and your WHOIS updated by showing the correct company name and address, Generate and submit a CSR (Certificate Signing Request) – a block of text that is encoded and given to the Certificate Authority when applying for an SSL Certificate, haver your domain and company validated and finally install the issued certificate.

Heartland Webhostings process for an SSL Certificate is easy as they have an SSL wizard that does most of the work for you. You enter and review the contact information then select the auto-configuration option that they create for you. Once you approve the SSl request by hitting the link that you’ll receive through email heartlands system will install everything for you.