

Architectural design for electronic credit checking and mortgage approval system

[Technology](#), [Information Technology](#)



The architectural model is the graphical representation for the understanding of the system and reviewing whether the system fulfills the user's functional and non-functional requirements. The detailed architectural model is used to achieve the level of security in the system, the performance of the system as well as the effectiveness and efficiency (Coulouris, Dooimore, and Kindberg, 2001).

There are three (3) forms of the system architecture include client-based, server-based, and client-server architecture. As the proposed system for 'Electronic Credit Checking and Mortgage Approval' is online, therefore, I have chosen the client-server architecture.

Architecture Design

The client-server architecture for the proposed system that presents the client has to place a request to the web server by utilizing the web browser (Internet Explorer, Google Chrome, etc.). The web browser takes the Hypertext Transfer Protocol (HTTP) request, Files Transfer Protocol (FTP), data, etc. to the webserver of the Mortgage Company; the webserver would interact with the database server for the relevant information. The database server would send a SQL query to the database and the database returns the information against the query. The database server would reply to the webserver with the information received from the database. The web server would display the information on the web browser of the client. The web application would be deployed on the webserver or application server; the database server would contain the database as shown in the following

diagram (Kambalyal, n. d).

The system architecture that has been used for deploying the web application is a 3-tier architecture that provides higher flexibility; high security can be implemented at each level of the service, and high performance due to the sharing of tasks between servers, moreover, it can be extended (scalable) with the requirements of the Mortgage Company (Kioskea, 2012).

Design Notes

The client has to use the web browser to access the web application over the internet, in order to provide security the client's request has to be passed through the firewall deployed in the computer network.