Nowadays, Internet is the main standard for communication which is being used by quantity of users through the world. At the same time, its profitable nature is producing increasing exposure to heighten cyber-attacks and there has been a massive escalation in the amount of DDOS (distributed denial of service attack) especially the HTTP Flood attacks on web application servers over the years. Network assets such as web servers, ftp servers, email servers, network bandwidth and network assets are frequently the targets of DoS attacks. In this research we focus on the HTTP Flood DoS attack, its characteristics, and the propose approach to mitigate by creating a model which we used in analysing http packets and we came up with appropriate results.