Try Hack Me DNS in Detail lab

This lab covers Domain Name Systems or DNS the phone books of the internet. A DNS server is where you take the name of your website to look up its number. Domains are broken down into a hierarchy think library for the phonebooks. We have top level domains (TLD) witch is the .com in you web address. There are two types of TLD Generic (GTLD) and country code (CCTLD). GTLD’s would tell you what the sight was like .com or .gov and CCTLD’s would be where the sight is located. Second level domain is the middle of your url for instance .com is the TLD and google would be the second level domain the second level has some restrictions when it comes to naming you can only use alphanumeric symbols but can not start or end with hyphens. Last there are subdomains witch is the www in you url and have the same restrictions as the second level domain with the big difference being you can use more then one subdomain separated by a period. As well as levels there are different types of dns records we have A witch resolves to IPv4, AAAA witch resolves to IPv6, CNSME think of this as an alternat url, MX resolves to an address of the server that handles the emails for the domain and finally we have txt records are free text fields where any text based data can be stored. When you make a DNS request there are several things that happen your machine will check its local cache to see if it already has the address if it doesn’t it will ask the DNS provided by your ISP witch is then passed onto the DNS back bone to send you to the correct TLD sever form there your sent to the authoritative DNS server where you DNS records are stored and can be updated and a dns record I sent back to the client.