

Assignment 3
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1. The reason for the drop in total revenue from music sales and licensing between 1999 and 2009 is due to numerous factors:
 - a. Broadband Internet is much faster than a dial up connection. This means the user does not have to wait hours for a large file to download. Broadband Internet makes transferring files more practical and efficient, saving the user a lot of time in the process. With the increase in popularity of broadband internet, music and video sharing has become increasingly popular.
 - b. Considering CDs and DVDs store their content in a digital form, anyone with the proper equipment and know how can make exact copies of the media. This means that CDs can be copied or downloaded then burnt on to blank discs.

The US government is fighting the piracy of digital media by introducing new legal and technological restrictions on copying. The Digital Millennium Copyright Act (DMCA) was introduced by Congress in 1998. The DMCA made it illegal to sell any software that was designed to act outside of copy controls, introduced harsh penalties for the unethical use of copyrighted materials, and required that royalties be paid for any copyright music that is used on the Internet.

2. The term 'fair use' can be explained by the following quotes which have been taken from the text "Ethics For The Information Age" 6th edition by Michael J. Quinn.
 - "An educational use is more likely to be permissible than a commercial use".
 - "Use of nonfiction is more likely to be permissible than use of fiction".
 - "Published works are preferred over unpublished works".
 - "Brief excerpts are more likely to be permissible than entire chapters".
 - "Use of out-of-print material is more likely to be permissible than use of a readily available work".
3. I agree with the findings of the Oslo city court. Namely: the "*Oslo City Court acquitted Johansen. The court ruled he had the right to access information on a DVD that he had purchased. It noted the program Johansen developed to decrypt DVDs could be used for both legal and illegal Purposes*" The case "In 1999 16-year-old Norwegian Jon Johansen wrote a computer program called DeCSS that decoded the CSS encryption scheme. DeCSS enabled him to view DVD movies on a computer running the Linux operating system, which was not supported by CSS." The software was of his own creation. It also made the DVD movies able to be view on the Linux OS that the CSS encryption scheme would not allow. He has to right to view the information of the DVD he had purchased.

There have been many attempts to create what is often called Digital Rights Management, or DRM. Some of these systems have had issues of invading the privacy of the people who used them. None of them have been as completely effective. The problem of allowing a person to hear or see what you are selling them but preventing them from sharing that same item with others, seems to be impractical. Making this problem even more difficult is a person's right to privacy, meaning does a company have the right to track what you do with what you bought. Can you resell what you bought? A person's right to make their own person backup also makes DRM impractical. Balancing Copyright, Intellectual property, Privacy, and Fair Use is a very complex issue.

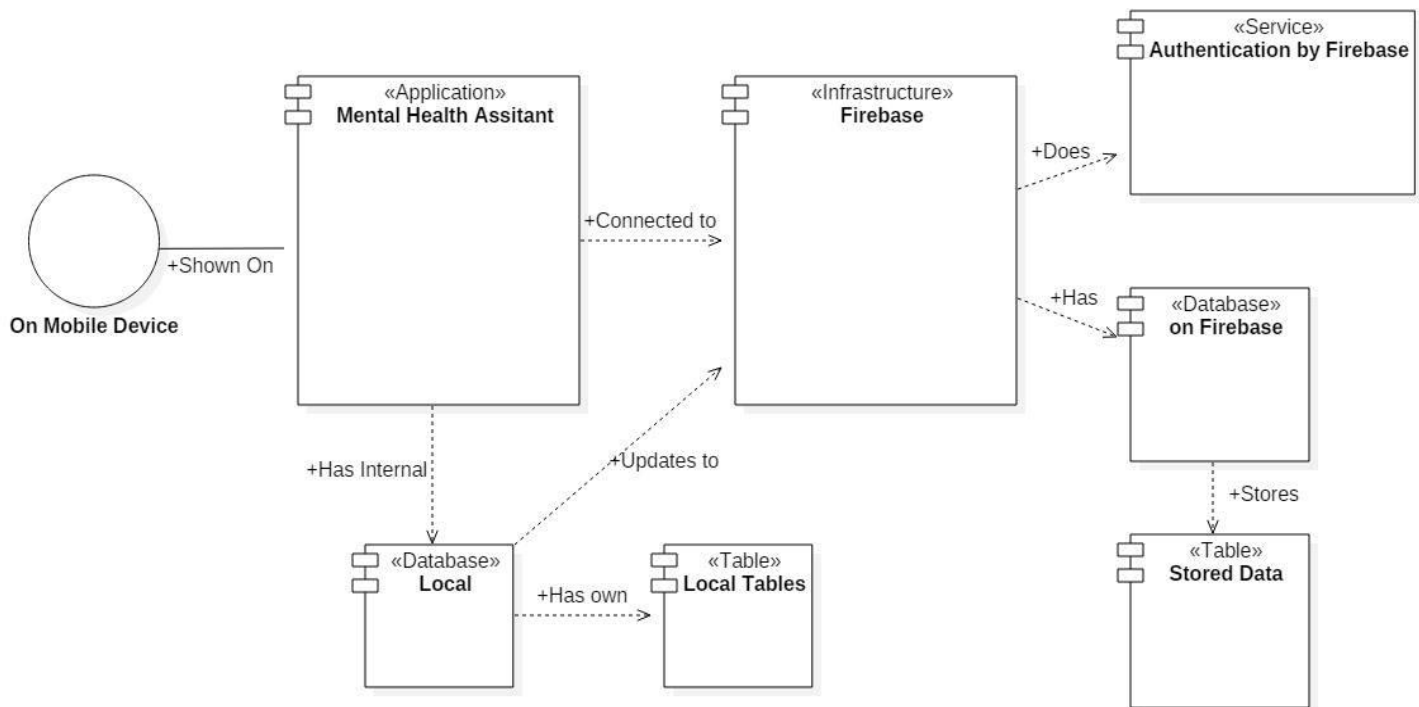
4. The "Pirate Bay" gets attention both because of its' size, number of users (25 million, in the article), and the term Pirate. Making it sound connected to pirating digital content. *"Established in 2003, the Pirate Bay has been called "the most visible member of a burgeoning international anti-copyright—or pro-piracy—movement" The site is in Sweden and is subject to Swedish Law. "The movie industry pressured the Swedish government to do something about the Pirate Bay, and in 2006 Swedish police raided its offices and confiscated 186 servers, but the site was offline for only three days". The site responded to the charges saying the site itself does not host any copyrighted material, therefore was not in violation of copyright laws. The site is still up and running today, it has just changed the sites domain to things like thepiratebay.org, thepiratebay.se, or thepiratebay.sx. The people who were sued, after the cases were appealed in Nov 2010 in Sweden, the 1-year sentences got shortened but, the fines were increased from \$3.6 million US to \$6.5 million US. The main site "thepiratebay.org," is blocked by some IP providers in some countries. I am not sure of the current numbers. Even in countries where the main site is blocked, there exists main proxy site that do not block access to the site in those countries.*

Cyberlockers are file-hosting services or cloud services. They store the files uploaded, unlike Bit Torrent and the Pirate Bay. Often access is password protected, and people can choose to share files with certain people, or they could be shared publicly. There are now many of these types of services, including Google Drive and GitHub.

Megaupload was a prominent Cyberlocker, it charged a subscription fees, and was charged that it paid some subscribers for uploading copyrighted material. In 2012 in was shut down by the FBI and police in both New Zealand and Hong Kong. It was called *"a worldwide criminal organization whose members engaged in criminal copyright infringement and money laundering on a massive scale with estimated harm to copyright holders well in excess of \$500,000,000 and reported income in excess of \$175,000,000".* The big differences from the Pirate Bay is that it charged subscription fees from users, it hosted the material, and it paid for copyrighted materials. These actions show Megaupload was clearly not in the realm of Fair Use.

Whether these type of services are fair use can vary greatly from user to user. Fair use depends greatly on what is shared and who if anyone it is shared with. Fair use also depends of if money if made from this sharing, or if the sharing causes harm to the owner of the material.

Component Diagram



Deployment Diagram

