

Lab 1 - Introduction to Mobile Development

MODE 4201



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**1.** **Mobile Development Topic:**

In this report I am going to be writing about technology in the medical field. Technology has played a very essential role in the medical field ever since it was first introduced for patient record storing in the 1960’s. For that reason, I am going to explain the history of record keeping technology in the medical field, followed by a discussion on the advantages and disadvantages of this technology.

As I mentioned previously, before the 1960’s all medical records were kept using paper documents. However, this changed when Dr. Lawrence Weed created the first problem-oriented medical record system and introduced it to 73 hospitals in 1965 (Source 1). This system was only the beginning of technology in the medical field, as throughout the rest of the 1960’s and into the 1970’s new and improved medical information storing systems began to be developed. These systems came to a pinnacle in the 1980’s when having desktop computers became the norm and windows-based management applications could be easily accessed. This new practice of virtual storage was backed by the Institute of Medicine in the mid 1980’s (Source 1) and by the 1990’s, with the release of the world wide web, most medical files were being stored virtually. While these systems were convenient, a study on these medical storage systems in 1991 brought to light many security issues that were caused by unsatisfactory coding. This caused the World Health Organization to adopt the ICD-30 coding standard, which is a standard that all health management systems must follow to avoid security hazards. This solved the security issue, however in the early 2000’s problems were still arising from errors occurring in these medical records. Therefore, in America, and later Canada, official laws have been put in place to make sure these medical record systems are properly managed, with the records now officially being called electronic health records or EHR. With these new laws in place, virtually storing EHRs has become commonplace and is used in every hospital in Canada.

As can be seen from the long history of technology in the workplace there are many advantages to using virtual record storage systems, however they do have there disadvantages as well. The main advantages to storing records virtually are the organization, the reliability, and the ability to transfer and view records across the internet. The ability to have a system automatically organize all records is very helpful and the ability to query a database instead of searching through stacks of papers has led to a large productivity increase. The ability to share EHRs near instantly to hospitals around the globe is also another very useful feature that can save not only confusion but lives as well. While the advantages outweigh the disadvantages in this field, there are still the issues of potential security breaches, potential confusion, and the cost. The first disadvantage isn’t specific to medical record keeping, as the issue of cyber security is on that plagues all online applications, but it is still a big one. As one would expect online medical records are some of the most secure records, meaning this disadvantage isn’t very prevalent but there is no such thing as a perfectly secure system online. The next issue is that some of the medical systems used can be confusing to newcomers, which can cause inefficiency and potential errors. Finally, there is the cost of these record systems. It is estimated medical organizations spent over 1.5 trillion dollars in 2018 on medical technology (Source 1), and while this is something worth the cost it is still worth noting that these systems are not cheap. So as you can see, while there are some disadvantages to EHRs the advantages of these systems greatly outweigh them making these tools essential in the medical field.

**2. Mobile Manufacturer:**

For my mobile manufacturer comparison, I have chosen to compare the two largest mobile manufacturing companies Samsung and Apple. I chose to compare these two companies because ever since the smart phone race began people have been comparing Apple and Samsung phones.

|  |  |  |
| --- | --- | --- |
| Manufacturer | Samsung | Apple |
| Phone Model | Samsung Galaxy S21 Ultra | iPhone 13 Pro Max |
| Picture/Photo | A picture containing text, monitor, electronics, camera  Description automatically generated | A picture containing white  Description automatically generated |
| Price | $1,639.99 | $1,595.00 |
| Release Date | January 29, 2021 | September 24, 2021 |
| Operating System | Android 11 | IOS 15 |
| Chipset | Snapdragon 888 | Apple A15 Bionic |
| Processor | Snapdragon 888 (US)/Exynos 2100 (WW) | A15 chip |
| Memory (RAM) | Up to 16GB | Up to 6 GB |
| Memory (internal) | Up to 512GB | Up to 512GB |
| Memory (external) | n/a | USB-C compatible harddrives |
| Display | Infinity-O Display (2400x1080) | Super Retina XDR display with ProMotion |
| Camera (rear) | 108MP main, 12MP ultrawide, 2 10MP telephoto, and laser autofocus sensor | Pro 12MP camera system: Telephoto, Wide and Ultra Wide cameras |
| Camera (front) | 40MP | Pro 12MP camera system: Telephoto, Wide and Ultra Wide cameras |
| GPS | Yes | Yes |
| Battery (talk time) | 11 hours 25 minutes | 28 hours |
| Battery (standby) | 11 hours 25 minutes | 14 hours |
| Network | 5G | 5G and LTE |
| Synchronization with desktop/laptop | Yes - Pc | Yes - Mac |
| Voice enabled | Yes - Bixby | Yes - Siri |
| Browser | Samsung Internet Browser | Safari |
| Screen Size | 6.8 inches | 6.7 inches |
| Weight | 229g | 240g |

**3. Mobile Plans:**

|  |  |  |
| --- | --- | --- |
| Service Provider | Bell | Rogers |
| Plan | Unlimited Share 30 | Rogers Infinite |
| Calls | Unlimited Calls | Unlimited Calls |
| Data | 30 GB | 30 GB |
| Messaging | Unlimited Texts in Canada | Unlimited Texts in Canada |
| Global Texting | Yes | Yes |
| Voice Mail | Enhanced voicemail | Yes |
| Call Features | Call forwarding & call screening | Call forwarding |
| Service Credits | Up to $200 | $50 |
| Fees | Roaming fees | Roaming fees |
| Usage Policy | Unlimited usage | Unlimited usage |
| Coverage | 5G | 5G |
| Price | $80/month | $80/month |
| Plan Perks | Special offers for discounts on electronics. | Special offers on services like Disney+ and Apple Music. |

Sources:

1. *The History of Healthcare Technology and the Evolution of EHR*. (2018, March 11). VertitechIT. https://www.vertitechit.com/history-healthcare-technology/