

Lab 01:
Introduction to Mobile Development
Aaron LeBlanc
MODE 4201-02



Contents

Cover Page-----	Page I
Contents Page-----	Page II
Section 1: How Mobile Computing effect an individual? -----	Page III – IV
Section 2: Mobile Manufacturers-----	Page V – VI
Section 3: Mobile Plans-----	Page VII
References-----	Page VIII

Section 1: Mobile Development Topic

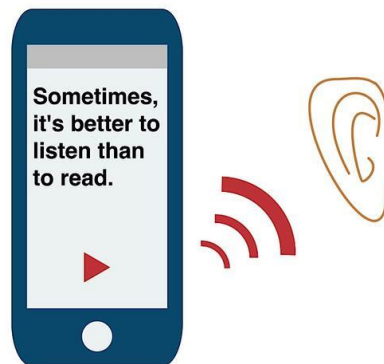
Topic: How Mobile Computing effect an individual?

Meaning/definition of how Mobile Computing effect an individual?

I will be focusing on how mobile computing devices, but more specifically smart phones have had an effect on its users and what kind of effects using these smart phones can lead too. These effects range from mental effects both positive and negative as well as physical effects such as neck pain, eyesight issues as well as hearing issues. Mobile devices have also enabled users to obtain information online as well as purchase items online, all while on the go. This has been a tremendously useful application of mobile devices as it has given vast more power to the users of them.

Positive effects of Mobile Computing on users:

Mobile computing devices have led to greater connectivity between people in so many different ways from being able to communicate with friends, family, or business partners across the globe on the go to being able to get in touch with emergency services if your somewhere where others can't reach you. Cell phones can also be used to help those who suffer with speech difficulties as they can use them to text or even use text to speech applications.

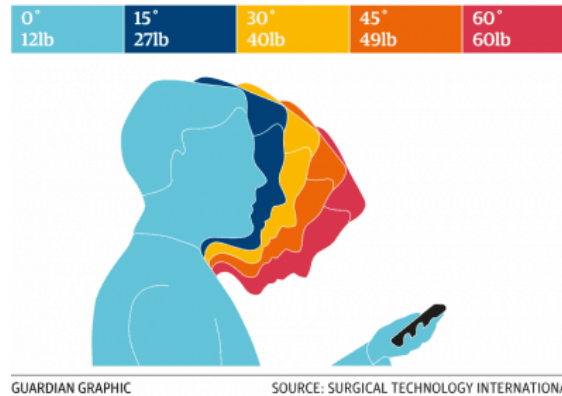


Negative effects of Mobile Computing on users:

The first negative effect I will touch on is how using smart phones has led to many people dealing with chronic neck and back pains from the way they hunch over and look at their phone screens. Below I have included an illustration that demonstrates how much weight is placed on the spine based on the angle you tilt your head at.

The burden of staring at a smartphone

Effective weight on the spine as forward tilt increases



The second negative effect that mobile computing has had on its users is that it can create or worsen symptoms of depression and anxiety depending on the user and the way the mobile device is used. Researchers have found links between overuse of smartphones and depression which they believe one occurs possibly because, “may interfere with other pleasurable activities and disrupt social activities, thereby reducing behavioral activation and subsequently increasing depression.” (Rosenfield, J., 2017, June 13).

Section 2: Mobile Manufacturers

Manufacturer	Apple	Google
Phone Model	iPhone 13 Pro Max	Pixel 5
Picture/Photo		
Price	From \$1399	From \$636
Release Date	September 24 th , 2021	August 26 th , 2021
Operating System	iOS 15	Android 11
Chipset	Apple A15 Bionic (5nm)	Qualcomm SM7250 Snapdragon 765G 5G (7 nm)
Processor (CPU)	Hexa-core (2x3.22 GHz + 4xX.X GHz)	Octa-core (1x2.4 GHz Kryo 475 Prime & 1x2.2 GHz Kryo 475 Gold & 6x1.8 GHz Kryo 475 Silver)
Memory (RAM)	6GB	6GB
Memory (Internal)	128GB-1TB	128GB
Memory (External)	N/A	N/A
Display	6.7" Super Retina XDR with ProMotion, OLED Display 2778-by-1284 pixel resolution at 458 ppi	6.34 inches, 97.0 cm ² (~85.0% screen-to-body ratio) 1080 x 2400 pixels, 20:9 ratio (~415 ppi density)
Camera (Rear)	Pro 12MP Camera, Telephoto, Wide and Ultra Wide. Digital zoom up to 15x. 3x Optical Zoom.	12.2 MP, f/1.7, 27mm, (wide), 1/2.55", 1.4µm, dual pixel PDAF, OIS, LED flash, Pixel Shift, Auto-HDR, panorama
Camera (Front)	12 MP, f/2.2, 23mm (wide), 1/3.6"	8 MP, f/2.0, 24mm (wide), 1.12µm
GPS	Yes	Yes
Battery	Li-Ion 4373 mAh, non-removable (16.75 Wh) USB Power Delivery 2.0 MagSafe wireless charging 15W	Li-Po 4680 mAh, non-removable. Fast charging 18W. USB Power Delivery 2.0
Battery (Talk Time)	Up to 38h	25:54 h
Battery (Standby)	Up to 28 h (multimedia)	12-20 h

Network	GSM/ CDMA/ HSPA/ EVDO/ LTE/ 5G	GSM/ HSPA/ EVDO/ LTE/ 5G
Synchronization with Desktop/Laptop	Yes	Can connect phone but can't synchronize.
Voice Enabled	Yes	Yes
Browser	Safari	Google Chrome
Weight	240 g (8.47 oz)	183 g (6.46 oz)
GPU	Apple GPU (5-core graphics)	Adreno 620

Section 3: Mobile Plans

Service Provider	Bell	Rogers
Plan	Unlimited Share 30	Rogers Infinite
Calls	Unlimited Canada-Wide	Unlimited Canada-Wide
Data	Unlimited (High speed up to 30GB)	Unlimited (High speed up to 30GB)
Messaging	Unlimited Canada-Wide	Unlimited Canada-Wide
Global Texting	No 0.20 cent each	Not free \$0.40
Voice Mail	Enhanced voicemail	Enhanced Voicemail
Call Features	Call and name display	Call and name display
Service Credits (as free upgrades)	Save \$100 on the purchase of a new phone	Save \$15 a month on every additional line you add
Fees	\$80 plus tax	\$80 plus tax
Usage Policy (Terms and Conditions)	https://www.bell.ca/Mobility/Cell_phone_plans/Unlimited-plans	https://www.rogers.com/phones/bring-your-own-device?flowType=byod
Coverage	https://www.bell.ca/Mobility/Our_network_coverage	https://www.rogers.com/mobility/network-coverage-map?icid=R_WIR_NTW_HEUQFZ
Canada-US Plan Option	Yes for \$100/month	Yes for \$100/month
Speed after slow down	512Kbps	512Kbps

As you can see both plans are nearly identical.

References

- Soda, B. (2019, November 22). *Do you have TEXT Neck? 6 tips to help!* Connecticut Orthopaedics. Retrieved September 23, 2021, from <https://www.ct-ortho.com/patient-resources/patient-education/articles/do-you-have-text-neck-6-tips-to-help/>.
- Rosenfield, J. (2017, June 13). *Is your mobile phone use bad for your mental health?* Mental Floss. Retrieved September 23, 2021, from <https://www.mentalfloss.com/article/501676/your-mobile-phone-use-bad-your-mental-health>.
- Wolber, A. (2017, July 5). *4 text-to-speech apps that will read online articles to you.* TechRepublic. Retrieved September 23, 2021, from <https://www.techrepublic.com/article/4-text-to-speech-apps-that-will-read-online-articles-to-you/>.
- Joseph, C. (2019, January 10). *Problems with cellphone use in manufacturing plants.* It Still Works. Retrieved September 23, 2021, from <https://itstillworks.com/problems-cellphone-use-manufacturing-plants-12195045.html>.
- Apple iPhone 13 Pro Max.* Apple iPhone 13 Pro Max - Full phone specifications. (n.d.). Retrieved September 23, 2021, from https://www.gsmarena.com/apple_iphone_13_pro_max-11089.php.
- Google pixel 5a 5g.* Google Pixel 5a 5G - Full phone specifications. (n.d.). Retrieved September 23, 2021, from https://www.gsmarena.com/google_pixel_5a_5g-11059.php.
- Cell phones and Smartphones: Mobility: Bell Canada.* www.bell.ca. (n.d.). Retrieved September 23, 2021, from https://www.bell.ca/Mobility/Build_your_mobile_solution?lang=en&prov=ON&loc=rateplanStep.
- Rogers. (n.d.). Retrieved September 23, 2021, from <https://www.rogers.com/phones/?flowType=nac>.

