Introduction to Mobile Development- Lab 1

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September 11, 2024

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# The Mobile Revolution

**The Impact of Mobile Computing on Individuals**

**Introduction**

Mobile computing has been a driving force in the digital era. With devices like laptops, tablets, smartphones, and even wearables becoming so accessible, it has completely changed how we live, work, and interact with technology every day. In this report, I’ll dive into the history, meaning, uses, advantages, and disadvantages of mobile computing, along with what the future might hold. I’ll also share some personal insights on how mobile computing has impacted my daily life.

**History and Definition**

Mobile computing isn’t as recent as we might think—it’s been around for quite a while. It all started with the introduction of portable computers in the 1980s, like the Osborne 1. It was heavy, clunky, and not exactly what we’d consider "mobile" by today’s standards, but it laid the groundwork. Fast forward to the 1990s, and you had PDAs (Personal Digital Assistants) becoming a thing, though they didn’t gain the same level of popularity until smartphones hit the market. The real game-changer was when Apple launched the first iPhone in 2007. This was when people truly started to see the potential of mobile computing, and it hasn’t slowed down since.

**Timeline**

* **1980s**: Portable computers like the Osborne 1 and Compaq Portable hit the market.
* **1990s**: PDAs and early mobile phones started gaining traction.
* **2000s**: BlackBerry paved the way for smartphones, followed by Apple’s iPhone, which revolutionized the market.
* **2010s**: The introduction of tablets and wearables, along with mobile apps, transformed how we use mobile devices.
* **2020s**: 5G technology has taken mobile computing to a new level, allowing faster speeds and connectivity.

**What Mobile Computing Means**

Simply put, mobile computing is about being able to access and use computing resources without being tied down to a specific location. It’s all about that flexibility to check your emails on a train, join a video call from a coffee shop, or track your health on a smartwatch.

**Uses of Mobile Computing**

Mobile computing has become such a big part of our lives that it’s hard to pinpoint just one use. Here’s how it fits into different aspects of our daily routines:

1. **Communication**: From WhatsApp to Zoom, we can connect with people from across the globe in seconds. This has been especially crucial during the pandemic, keeping us connected when we couldn’t be together in person.
2. **Work and Productivity**: Laptops, tablets, and even smartphones have made it possible to work from anywhere. Cloud services like Google Drive and Microsoft OneDrive mean we can access work files without being in the office.
3. **Entertainment**: Whether it's binge-watching Netflix, streaming music on Spotify, or playing mobile games, there’s no shortage of ways mobile devices keep us entertained.
4. **Navigation**: GPS-enabled apps like Google Maps have made getting lost nearly impossible, and they’re incredibly handy for those of us with no sense of direction.

**Advantages of Mobile Computing**

There’s a reason why mobile computing has taken over our lives—it’s incredibly useful. Some of the key benefits include:

1. **Convenience**: Let’s face it, being able to handle almost everything from our phones or tablets makes life easier. Whether it’s shopping online, checking emails, or reading the news, it’s all there in the palm of your hand.
2. **Increased Productivity**: You don’t need to be tied to a desk anymore. With mobile devices, you can work on a presentation while commuting or respond to work emails while waiting for your coffee.
3. **Real-Time Information**: Need to know the weather, check your bank balance, or get breaking news? Mobile computing offers instant access to information.
4. **Enhanced Communication**: Staying in touch with family, friends, and colleagues is easier than ever, regardless of where you are.

**Disadvantages of Mobile Computing**

While mobile computing has its perks, it’s not without its downsides:

1. **Distractions**: Let’s be honest; it’s way too easy to get distracted by social media, games, or notifications when you should be working or studying. I’ve found myself guilty of this more times than I’d like to admit.
2. **Security and Privacy Risks**: Mobile devices are more vulnerable to cyberattacks. There’s always the risk of data breaches or malicious apps. This means we have to be extra cautious about what we download or the information we share.
3. **Health Issues**: Staring at screens for long periods can lead to eye strain, neck pain, or worse—insomnia. It’s a good idea to take regular breaks, something I’m still working on myself.
4. **Overdependence**: We’re becoming more and more reliant on our devices, to the point where not having your phone can feel like losing a limb. It’s a bit scary when you think about how much we depend on them.

**Personal Experience**

Mobile computing has honestly changed the way I live. I use my smartphone for pretty much everything—whether it’s checking emails, staying updated on social media, or streaming music during my daily workouts. When I traveled, I didn’t need to lug around a laptop because my phone had everything I needed. However, it hasn’t been all perfect. I’ve had moments where I’ve realized I’m spending way too much time on my phone, to the point where I’ve had to set limits on certain apps just to cut down on my screen time.

**Recent Trends and Technologies**

Mobile computing is always evolving, and there are a few trends worth keeping an eye on:

1. **5G Technology**: With faster speeds and lower latency, 5G is set to change the way we use our mobile devices, especially with things like augmented reality (AR) and virtual reality (VR) becoming more mainstream.
2. **Mobile Payments**: Services like Apple Pay, Google Pay, and Samsung Pay are quickly becoming the norm, making it easier to make purchases with just a tap of your phone.
3. **Wearables**: From fitness trackers to smartwatches, wearable technology is more popular than ever, helping us monitor our health, stay connected, and even make calls.
4. **Mobile AI**: Artificial Intelligence is making its way into mobile devices in a big way. Whether it’s voice assistants like Siri and Alexa or AI-enhanced cameras, our phones are getting smarter every day.

**Future of Mobile Computing**

Looking ahead, mobile computing is only going to become more advanced. With 5G becoming more widespread, we can expect faster speeds and even more possibilities, like improved AR/VR experiences. The Internet of Things (IoT) is also set to make our lives more connected, as more devices become integrated into our everyday routines.

**Conclusion**

Mobile computing has undoubtedly transformed how we live and work. From the convenience of accessing information on the go to the way it’s revolutionized communication, it’s clear that mobile technology is here to stay. But, it’s important to be aware of the challenges that come with it, like distractions and security concerns. As we continue to adapt to this technology, finding a balance between staying connected and taking breaks is key.

# Clash of Titans

|  |  |  |
| --- | --- | --- |
| Category | iPhone 16 Pro Max | Samsung Galaxy s24 Ultra |
| Manufacturer | Apple | Samsung |
| Photo |  |  |
| Price | Starting at $1749.99  (Canadian Price) | Starting at $1799.99  (Canadian Price) |
| Release Date | September 20, 2024 | January 24, 2024 |
| Operating System | iOS 18 | Android 14 |
| Chipset | Apple A18 Pro | Snapdragon 8 Gen 3 |
| Processor (CPU) | Hexa-Core | Octa-Core |
| Memory (RAM) | 8 GB | 12 GB |
| Memory (Internal) | 256GB-512GB-1TB | 256GB-512GB-1TB |
| Memory (External) | Not supported | Not supported |
| Display | 6.9 Inches LTPO Super Retina XDR OLED | 6.8 inches Dynamic AMOLED 2X |
| Camera (Rear) | Quad 48 MP main, 12 MP ultrawide, 12 MP telephoto, 3D LiDAR | Quad 200 MP main, 12 MP ultrawide, 10 MP telephoto, 10 MP periscope |
| Camera (Front) | 12 MP | 40 MP |
| GPS | Yes | Yes |
| Battery | 4800 mAh | 5000 mAh |
| Battery (Talk Time) | Up to 28 hours | Up to 32 hours |
| Battery (Stand by) | Up to 110 hours | Up to 140 hours |
| Network | 5G | 5G |
| Synchronization With Laptop/Desktop | Via iCloud | Via Samsung DeX |
| Voice Enabled | Siri | Bixby |
| Browser | Safari | Samsung Internet |
| Additional Features | ProMotion 120Hz refresh rate, Ultra-Wideband 2 | S Pen support, Ultra-wideband 2 |

The winner:

Samsung Galaxy S24 Ultra

The winner of this showdown is the Galaxy 24 Ultra. Although both devices are comparable to each other, and nothing has come close to replicating apple’s user interface and ease of access, the technological specifications of the Galaxy S24 simply outdo those of the iPhone 16 Pro Max.

Notable differences:

**Camera Capabilities:** The Samsung Galaxy S24 Ultra shows a clear advantage in photography. The 200 Megapixel quad camera significantly outperforms the 48 Megapixel quad camera found on the iPhone 16 Pro Max. It also has a periscope camera, which is missing entirely on the iPhone.

**Battery Life:** The Samsung Galaxy S24 Ultra has a larger battery, providing longer talk and standby times, which is ideal for heavy cellphone users.

**RAM and Multitasking:** The 12 GB of RAM offered by Samsung, make it more capable of handling intensive tasks, multitasking, and apps than the 8 GB offering from Apple.

**S-Pen Support:** The S-Pen supports puts the Samsung Galaxy S24 over the edge. It provides a variety of productivity tools such as note-taking, drawing, and precise control, making it more versatile.

# The Ultimate Service Showdown

|  |  |  |
| --- | --- | --- |
| Category | Bell Mobile Plan | Rogers Mobile Plan |
| Service provider | Bell | Rogers |
| Plan | Essential 150 | 5G Infinite Extra |
| Calls | Unlimited | Unlimited |
| Data | 150GB, shareable | 150 GB, not shareable |
| Messaging | Unlimited | Unlimited |
| Global Texting | Unlimited | Unlimited |
| Voicemail | Supported | Supported |
| Call Features | Call Display, Call Waiting, Call Forwarding & Conference Calling | Call and name display, call waiting, forwarding and group calling |
| Service Credits | Offered to loyal customers on a case by case basis | Save $15/mo. on every additional line you add,  Finance a tablet or smartwatch and get a free tablet plan or smartwatch plan for 24 months |
| Fees | $60.00 one time connection fee  $80.00 monthly fee | $70.00 one time connection fee  $80.00 monthly fee |
| Usage Policy | Fair use policy on data | Fair use policy on data |
| Coverage | Nationwide 3G/4G/5G coverage  Many partners in the US and 200+ regions for roaming | Nationwide 3G/4G/5G coverage  Partnerships in the US and 185+ regions for roaming |
| Unique features | Crave basic with ads included  1000 international minutes included  EasyRoam included ($13.00 per day in the US, $16.00 per day in all other supported regions) | Spam call detection  1000 international minutes includes  Roam like Home included ($12.00 per day in the US, $15.00 per day in all other supported regions) |

The winner:

Bell Essential 150

The winner of this showdown the Bell Essential 150 phone plan, although these plans are nearly identical at first glance, there are a few minute details which give this the edge over Roger’s 5G Infinite Extra.

Notable Differences:

**Shareable Data:** The data on the Bell Essential 150 Plan is shareable, which means other members of the family can be added to use the excessive 150 GB, on Rogers you can not share it, and the likelihood of the average consumer using 150GB of data is quite low.

**Service Credits:** Although Bell does not show any promotions on their website, the ones they offer are often more practical than Roger’s. I can attest to this through personal experience, after being with Bell for a year, and expressing no interest in a new line, they offered me 120GB of shareable data, with all the features from the Essential 150 plan for only $55.00 monthly, with no one time fee for switching plans.

**Unique Features:** Spam call detection, which is one of the “unique features” marketed by Rogers is not actually unique, most consumers just don’t know about it since it has to be enabled through the device’s settings. Furthermore, the addition of Crave Basic makes Bell a better deal, since Roger’s has a streaming platform which they are not offering on their plan.

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