The limitation of mobile devices

CS 436 Software Development on Mobile



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Smart phone VS PCs



VS



Power

Parameter	PC	Smart-phone
Power Source	Unlimited	Battery
Processor power	High	Low
Cooling	Yes	No
Power consumption	High	Low





Cost

Parameter	PC	Smart-phone
Low-end	Low	Low
Middle-end	Vary	Vary
High-end	High	High
Ultra-end	Vary high	No available











Portability

Parameter	PC/Laptop	Smart-phone
Weight	Heavy	Light
Size	Large	Small
Fit for	Table	Pocket











Features

Parameter	PC/Laptop	Smart-phone
Memory	Large	Small
Storage	250GB-1TB	8GB-64GB
Connectivity	Wire/Wifi	Wifi/ 3G,4G
OS	Fully featured	Slimmed down
User input	Keyboard/mouse	Touch/Gesture











Programming

Parameter	PC/Laptop	Smart-phone
Language	Many	Java, .NET, C/C++
Running Environment	Global	Sandbox
Permission	User	Application
Intense loop	Allow	Not Allow
Hardware fragmentation	Few	Many











Conclusion

Intensive computing → PC

Mobility computing → Smartphone

Require sensors → Smartphone