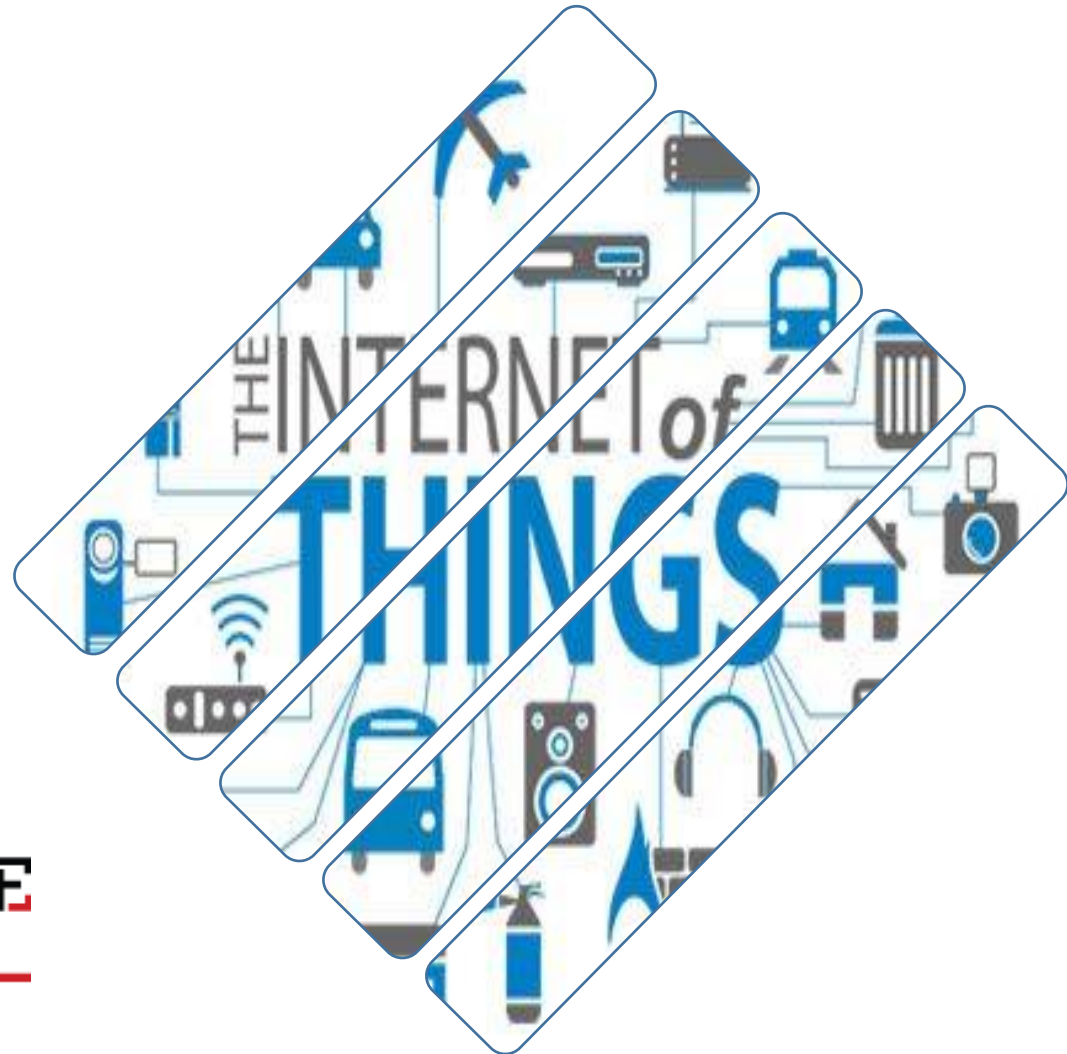


User experience aspects in IoT domain

dr. Matevž Pogačnik



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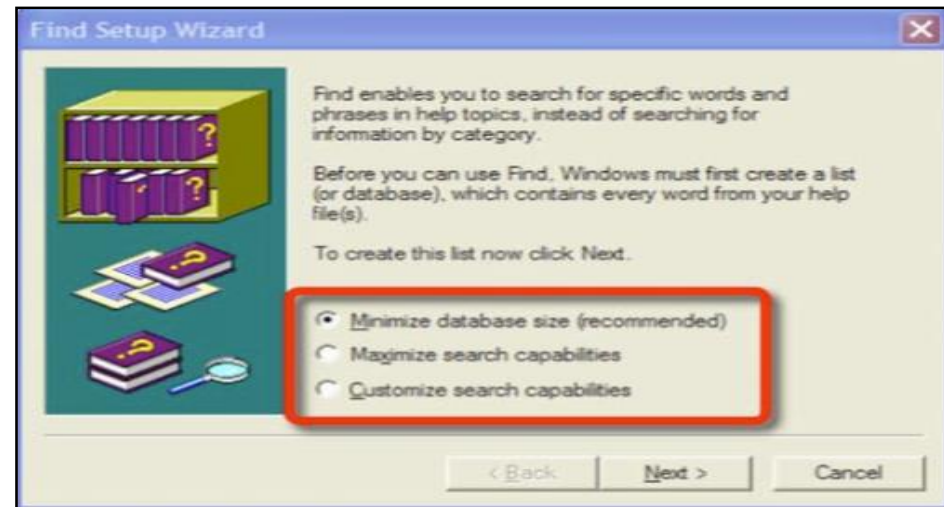
Standard Ux issues

- User in control
- Consistency
- Reducing memory load



Standard Ux issues

- Setup, installation, registration
- Every day usage
- Customer support
- Updates and new features
- ...



- But let's look at some basic questions

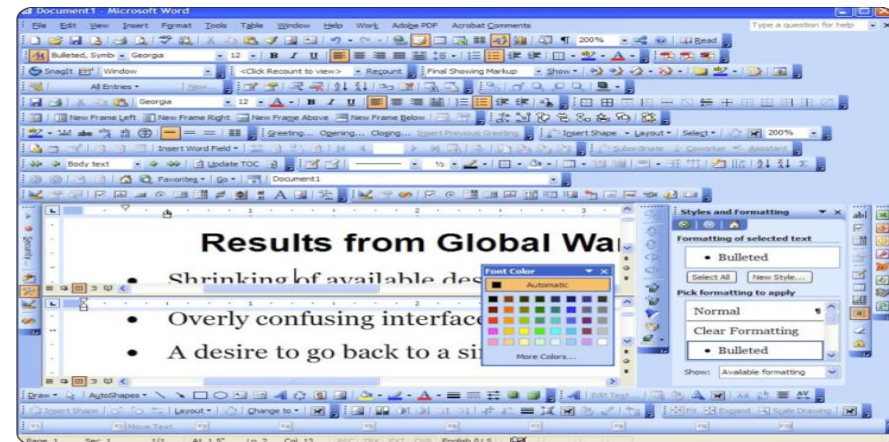
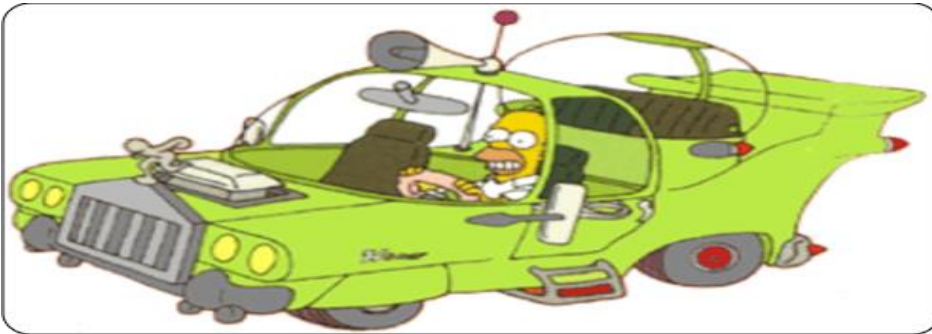
What does the user want?

- Medical, smart home, energy, surveillance, automotive solutions...
- Motivation:
 - Cost reduction
 - Medical issues
 - Healthy lifestyle
 - Convenience
 - Public safety
 - A status symbol



Which devices and apps

- Mobile, PC/laptop, TV, Car, gaming consoles, watches, ...
 - Is it worth covering every device?
 - Depends on the target user group
- Many apps or one to rule them all?



Which devices and apps

- Interaction modalities
 - Touch, voice, gesture, brain...
- Convenience vs. reliability
- Some situations require different modalities
 - Driving a car
 - Cooking
 - ...
- Accessibility issues!



Accessibility

- 1 billion people with disabilities
 - Demographic situation in the Western countries
- UN Convention on the Rights of Persons with Disabilities – 2006
- Web accessibility directive – 2016
 - Making public services available (in force until 2018)



Privacy and security

- IoT is about data
 - Who owns it?
- Security issues!
- User awareness!

FDA warns that certain pacemakers are vulnerable to hacking

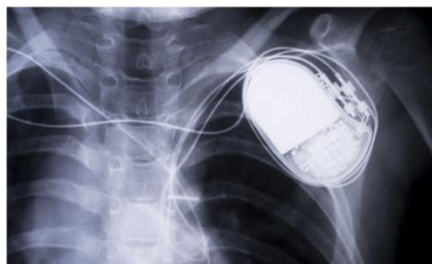
Transmitters made by St. Jude Medical could be modified to send nefarious code to cardiac devices.



Andrew Dalton, @doltown
01.09.17 in Medicine

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HACKERS REMOTELY KILL A JEEP ON THE HIGHWAY—WITH ME IN IT



I WAS DRIVING 70 mph on the edge of downtown St. Louis when the exploit began to take hold.

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Peeping into 73,000 unsecured security cameras thanks to default passwords

A site linked to 73,011 unsecured security camera locations in 256 countries to illustrate the dangers of using default passwords.



A HACKER'S VIEW OF ANTIVIRUS



PROTECT YOURSELF FROM ANTIVIRUS



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About those unsecured security cameras in the without password prot

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Conclusion

- IoT includes many opportunity to make our lives easier, safer, better...
- Ux is a big part of its acceptance
- But so are security and data issues
- Legislation is of paramount importance!



Thank you!

