Usability/Accessibility testing

Software Testing: INF3121 / INF4121

Summary: Week 11

Usability testing

- HCI definition, framework, and guidelines
- User-centric design processes

Accessibility testing

- Context of accessibility
- Accessibility personas and accessible design
- Web-content accessibility guidelines
- Assistive technologies and tools

Part I: Close-ended questions

Question 1

Which of the following is a purpose of HCI testing?

a. It tests that the software testing is approved by users
b. It tests that the software is precise in its calculations
c. It tests that the software is understandable
d. It tests that the software has all related documentation in place

Question 2

Which components constitute the HCI framework?

a. Maintainability, Portability, Security
b. Performance, Load, Stress
c. Laws, Industry-specific standards, Rules and Regulations
d. Interface standards, Usability, Interface dynamics, Aesthetics

Question 3

Which of the following represent interface dynamics principles?

a. Software has to be responsive, fast and adaptable to user needs and the given context
b. Software have to have the same response time for all devices that run on it
c. Software has to respond quickly to fast-changing needs
d. Systems have to be tested for load and stress, to verify their dynamic metrics

Question 4

Which of the following is a good practice when using system alerts?

a. Never write a short message – People need as many details as possible about the alert
b. Use capital letters or exclamation marks - Users see it better
c. Never use error codes, jargon or technical terms – Speak the users language
d. Place the system alert on the top-left of the page – Users see it first

Question 5

The purpose of HCI testing is to make a software system easy to learn and easy to remember.

a. True
b. False

Question 6

HCI testing's primary concern are the aesthetics of a software program.

a. True
b. False

Question 7

Which of the following elements are components of the HCI testing framework? (Draw arrows)

Components of the HCI testing framework	Laws and regulations
	Interface standards
	Interface dynamics
	Accuracy
	Usability
	Compliance
	Aesthetics

Question 8

When designing _____ software systems, one has to:

- Understand how the users think and behave
- Gather fact and data instead of relying on opinion and speculation
- Perform studies, design and test on users before implementation
- Iterate

Question 9

When specifying demands (creating requirements) for user-centric software systems, we can use personas.

a. True
b. False

Question 10

Is it allowed to use low-fidelity prototyping when designing a user-centric software system?

a. Yes
b. No

Part II: Exercises and Open-ended questions

Exercise 1: Design of Things

Watch the video on “Thoughtful design”

www.youtube.com/watch?v=E_rwwEo5YhY

Follow-up questions

- Can you give examples of everyday things that seemed confusing to you?
- Have you experienced confusing software?

Exercise 2: SiO Case Study

The Student Organisation (SiO) has updated their website (www.sio.no) to make it more effective, efficient, and user-friendly.

Now they are conducting "user observation" for usability testing.

A group of students are invited to perform some actions on the site.

Exercise 2: SiO Case Study

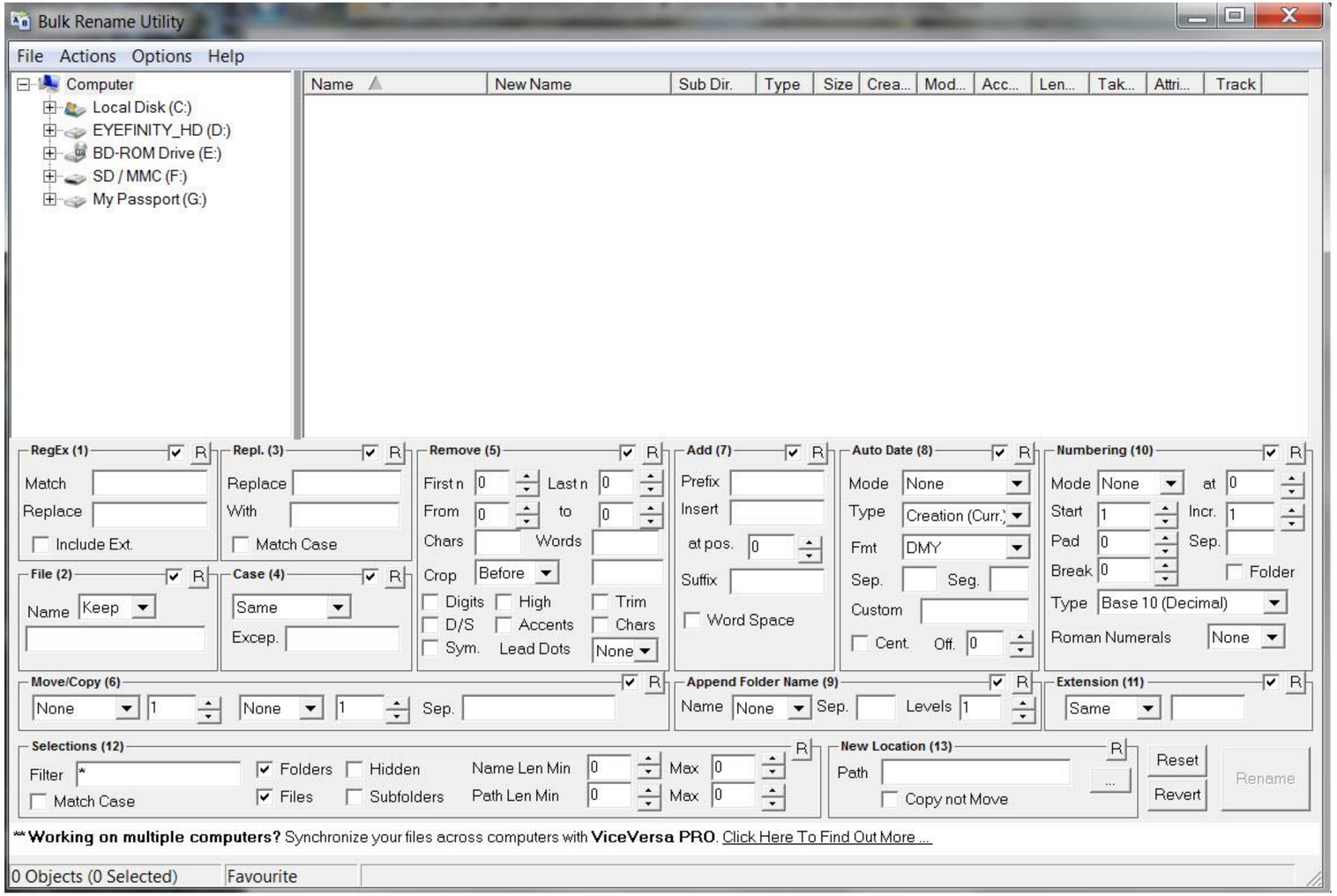
Which of the following points must an observer keep in mind while conducting "user observation"?

1. Try to cover a huge number of tasks and to make a lot of observations
2. Give the students time to perform the task instead of interrupting or showing them how to perform said task
3. The focus of the observation should be to check the expertise level of the users
4. The focus of the observation is to discover the problems in the software with the help of the user

Exercise 3: Usability Issues

What are some usability issues with the following application?

How would you improve the HCI aspects of this application?



Exercise 4: Usability Issues

Can you give examples of poorly designed websites?

Follow-up questions

- What are the usability issues with the site?
- Why is this poor practice?
- What should be done to improve the HCI aspects?

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