1. Which of these are refined process and goals of designing interactive systems that we will use in this class?
   A. Discover and understand users’ underlying goals and needs and use this to develop models of the users, their goals, behaviors, and context of use.
   B. Make computational artifacts that are useful, usable, and used.
   C. Design to the data and the models created and measure in what ways the new system improves the users’ experience.
   D. A and C
   E. A, B, and C.
2. Which of the following are good system goals related to a user interface?
   A. The mail system should be easy to learn.
   B. After 3 days of not using the mail system, a user should be able to block another user from sending them mail with no more than 1 mistake in their use of the interface.
   C. The user should be able to change the color of any button on the mail system main window at any time in an intuitive way. It should also be possible to change color of menu entry items based on user preferences.
   D. All of the above.
   E. None of the above.
3. What year was computer graphics demonstrated?
   A. 1953
   B. 1963
   C. 1973
   D. 1983

B
Sutherland slide – sketchpad so 1963
4. Which of the following did Steve Jobs conceptualize (invent)?
   A. Windows-based operating systems
   B. Tablet computers
   C. Smartphones
   D. None of the above

A, or D – he’s often given credit for Windows-based OS since the first commercial product came from his company.
5. The idea of hyper-links was first presented in what decade?
   A. 1940s
   B. 1950s
   C. 1960s
   D. 1970s

A
Slide on Vannevar Bush – hyper-text links so 1940s
1. Sketching is good because:

A. You will get better at sketching
B. Photographs are always better because they include everything.
C. You will most likely include elements that are relevant to the discussion you are having
2. What is the correct order for the different interviewing relationships when you are conducting an observational inquiry?

Your choices for interview relationships:

1. Expert/Novice
2. Partner Master/Apprentice
3. Guest/Host
4. Master/Apprentice
5. Interviewer/Interviewee

A. 1, 3, 5, 4
B. 3, 5, 1, 2
C. 3, 5, 4
D. 5, 4, 2
E. None of the above

D
3. You should ask questions about:
   a. anything you don’t understand
   b. only things you think you won’t be able to find on the internet
   c. acronyms used
   d. acronyms only if you don’t already know what they mean

A. a and d
B. b
C. a and c
D. b and d

C
4. You should always acknowledge agreement when the user tells you something.
A. TRUE
B. FALSE

B – acknowledgements should only indicate that you understand, not that you approve or disapprove
5. What's a breakdown?

A. When communication between a user and their boss doesn't happen.
B. A conflict between what the user wants to do and what they need to do.
C. An obstacle between what the user wants to do and what they can do in their existing environment with the tools at their disposal.

C
1. Which of the following does not fit the IRB definition of human subjects research:

A. Studies that involve human subjects to test or develop devices, products, or materials that have been developed through research for human use.

B. Data collection for internal departmental, school, or other institutional administrative purposes.

C. Studies using private information that can be readily identified with individuals, even if the information was not collected specifically for the study in question.

D. Information-gathering interviews where questions focus on things, products, or policies.

E. B and D.

B - collection to improve a service rather than generalizable research
D - CITI/SBE: not on the opinions, characteristics, or behavior of the individual
2. Which of the following is **not** a type of IRB approval:
   A. Exempt Review
   B. Expedited Review
   C. Extended Review
   D. Full Board Review
   E. None of the above.
3. In 2014, Facebook announced the results of a massive psychological experiment manipulating the emotions of 689,003 users. The users were not debriefed following the experiment. Facebook justified their actions by stating it was “consistent with Facebook’s Data Use Policy, to which all users agree prior to creating an account on Facebook, constituting informed consent for this research.”

This study was/would have been:
A. Ethical without IRB approval
B. Ethical with IRB approval
C. Unethical
D. None of the above.
E. All of the above.

C, because the risk could be high to participants no matter what, and no opt out
4. Google frequently conducts A/B testing, which consists of designing two versions of a web page (A & B), dividing the traffic between the two, and identifying the winning page design.

This practice is:

A. Ethical without IRB approval.
B. Ethical with IRB approval.
C. Unethical.
D. All of the above.
E. None of the above.
5. Experiment participants are told to evaluate the performance of software installers. However, the researchers are actually testing the effectiveness of different ways to present information. Participants are informed of the study’s real intent after the study is complete.

This practice is:
A. Ethical without IRB approval
B. Ethical with IRB approval
C. Unethical
D. All of the above.
E. None of the above.

B – Human research - “Studies that collect data through intervention or interaction with individuals.” – CITI/SBE, “students in research”

“Deception: Outright deception can sometimes be justified as essential for investigating a particular phenomenon. For example, subjects may be told that a study is about perception of visual phenomenon, when in fact it is about susceptibility to peer pressure from the researcher’s confederates.” – “informed consent” – CITI/SBE

From same place: “4. Whenever appropriate, the subjects will be provided with additional pertinent information after participation. This process often is referred to as debriefing. The debriefing process is an opportunity to provide subjects with information not disclosed during the initial consent process. It also provides an opportunity for subjects to withdraw and not have their identifiable data included in the research.”
6. A university professor needs participants for a study and decides to recruit from a class that she is currently teaching. The professor does not offer extra credit or any type of course-related incentive. This practice is:

A. Ethical without IRB approval
B. Ethical with IRB approval
C. Unethical
D. All of the above.
E. None of the above.

B – “students in research” – CITI/SBE - “Students as Research Subjects
In an academic institutional setting, students play an integral role as subjects in certain research situations (for example, research dealing with teaching methods, curricula, and other areas related to the scholarship of teaching and learning). An underlying principle of the regulations governing the involvement of human subjects in research is that the subject’s participation is voluntary and based upon full and accurate information. Consistent with an overall concern that research subjects should not be coerced, student and faculty researchers should take particular care to avoid the unintentional or subliminal coercion that may occur when potential subjects are also students. For this reason, faculty researchers, in particular, must avoid involving their own students as research subjects. Faculty who wish to involve their own students as subjects should be able to provide a good scientific reason, rather than convenience, for selecting those students as research subjects. The research project should be relevant to the topic of the class, and participation should be part of the learning experience for the students.
7. A university professor needs participants for a study and decides to recruit from a class that she is currently teaching. The professor offers extra credit for participation, but offers an extra credit to students who write an essay on ethics as an alternative.

This practice is:

A. Ethical without IRB approval
B. Ethical with IRB approval
C. Unethical
D. None of the above.
E. All of the above.

C –gray area, but really not ethical
See previous; someone else is required to recruit and collect info; tougher here since it will be clear who did and who didn’t participate; also probably no way to keep this info from the prof

“students in research” – CITI/SBE - ” Students as Research Subjects - “In instances where investigators can provide a good reason for involving their own students in their research, the IRB generally requires that someone other than the investigator (instructor) obtain informed consent and collect the data. When this is not possible, the IRB will consider other methods for obtaining consent and collecting data that would not reveal to the instructor whether or not a specific student participated in the research project until after final grades have been determined. The students should be informed of what these procedures are in the informed consent form. In addition, it is generally recommended that the investigator/professor provide a recruitment flyer or letter to a student pool, general student population, or both so that the student may be the one who initiates contact with the investigator/researcher.

If a student feels he/she has been coerced to participate in a study, he/she should immediately inform the institution's compliance office and/or the IRB
8. Vision researchers decide to install a video camera that watches people in the *Free Speech Zone* at CSU to gather data to identify what people are doing.

This practice is:

A. Ethical without IRB approval
B. Ethical with IRB approval
C. Unethical
D. None of the above.
E. All of the above.

A – “students in research” – CITI/SBE

“Observational studies of public behavior (including television and public Internet chat rooms) do not involve human subjects as defined when there is no intervention or interaction with the subjects and the behavior is not private.”
E:
Other problems section – qualitative data
Time task takes – continuous, ratio, has a 0 point that means absence of the thing being measured
Success – Y/N – nominal = qualitative
Number of Errors – ratio (has a natural 0 point)
Types of Errors – nominal - categories
SEQ – ordinal
Clicker Quiz - 2

What type of data does the SEQ question collect?

A. Quantitative
B. Qualitative
C. Both types
D. Neither type

Ordinal, therefore quantitative, A
Clicker Quiz - 3

We collected a failure/success metric. This is an example of a:

A. Ordinal datum
B. Category datum
C. B & E
D. None of A, B, or E
E. Nominal datum

Nominal, or category, therefore C
Clicker Quiz - 4

If we decide to code each success as ‘1’ and each failure as ‘0’, we have transformed this data into:

A. Interval data
B. Ratio data
C. Ordinal data
D. None of the above, it remains nominal data
E. Both A & C

C - Ordinal – discrete data “Discrete (natural order, but intervals may not be equal)”.