ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

Introduction to the UUX course

Fabio Vitali

Don't worry, this course is in English!

… but now I need to spend 10 minutes
to explain a few things in Italian…

Usability and User eXperience Design (UUX)

An introduction

Bad design

The lovers' bicycle
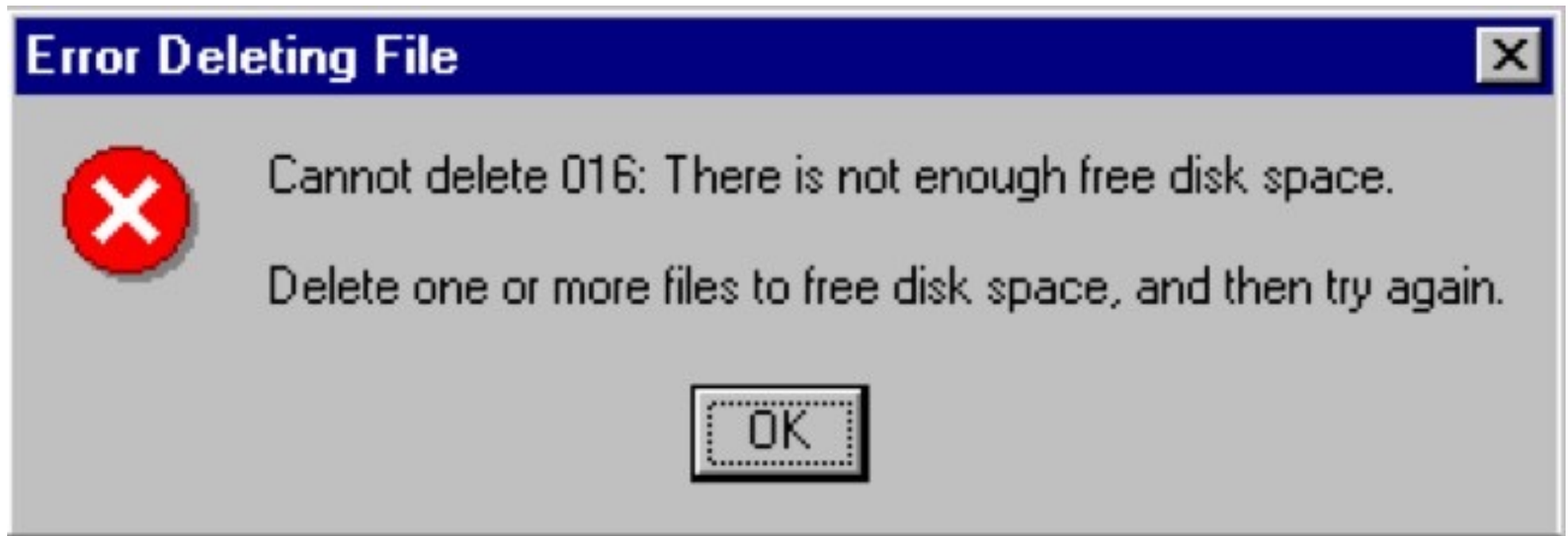
Bad objects

Bad labels

Bad paths

Bad buttons

Bad messages

Bad messages

Error Deleting File

Cannot delete 016: There is not enough free disk space.

Delete one or more files to free disk space, and then try again.

[OK]

Bad tasks

26.04.2007

RESET PASSWORD

Please confirm your current password and enter your new password twice. Your new password must be at least 6 characters long.

Current Password

New Password

Confirm Password

ACTIVATE

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Bad tasks

LOGOUT FAILED

You need to be logged in to log out. Please log in to log out.

☐ OK

Bad interfaces

ACCEPT JESUS, FOREVER FORGIVEN

Behold, now is the accepted time; behold, now is the day of salvation. - 2 Cor. 6:2

For the wages of sin is death; but the gift of God is eternal life through Jesus Christ our Lord.

-Romans 6:23

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▼

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TO BE YOUR SAVIOR!

POSITION AVAILABLE
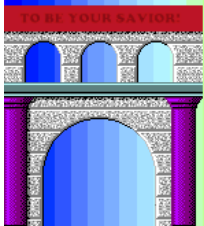
Back to the course

Introduction

Today we will briefly discuss:

◆ Description of the course "Usability & User eXperience (Design)"

Tomorrow we will briefly discuss

◆ Definition and history of the Discipline "Usability & User Experience"

◆ Reasons that make UUX a topic worthy of study

◆ A map of the types of topics handled in UUX

◆ A few initial reflections on the design of the interaction with an Information System

My contacts

Fabio Vitali

- ◆ Office at the III floor in via Ranzani 14 (DASPLab), just above the laboratory of via Ranzani
- ◆ Tel. 051 2094872
- ◆ E-mail: fabio.vitali@unibo.it
- ◆ Office hours: by appointment or right after classes

Please add "UUX" in your subjects for a priority in my answers.

Please only use your account @studio.unibo.it to write mails.

The UUX course

You are the collected group of three (3) different classes of three (3) different master courses:

- ◆ UUX is a required discipline of the I year Master Course in Computer Science (Laurea Magistrale in Informatica) (School of Science)
  - 36 hours over 10 weeks

- ◆ UUX is an elective discipline of the II year Master Course in Digital Humanities and Digital Knowledge (School of Literature)
  - 36 hours over 10 weeks

- ◆ UUX is an elective discipline of the II year Master Course in Artificial Intelligence (School of Engineering)
  - 44 hours over 12 weeks

The UUX course

Classes

- Monday 16:00 - 18:00 Aula Ercolani II
- Tuesday 16:00 - 18:00 Aula Ercolani II

Home page of the course

- https://virtuale.unibo.it/course/view.php?id=52783

Suggested texts

- There is no required written book,
- If you want something to read:
  - J.J. Garrett, The Elements of User Experience: User-Centered Design for the Web and Beyond, New Riders Pub. , 2010
  - Dix, Finlay, Abowd, Beale, *Interazione Uomo-Macchina*, McGraw Hill, 2004
- Also, you definitely should read this book, it's worth it.
  - D. Norman, The Design of Everyday Things: Revised and Expanded Edition (2013) Basic Books Tr. it.: La caffettiera del masochista, Ed. Giunti.

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Language of the course

All the material will be in English.

- ◆ There are still errors in the material I am sharing.
- ◆ Please inform me of odd-looking texts, forgotten bits in Italian, and additional explanations you may want to be added.

Classes will be in English if at least ONE foreign student is present

- ◆ I will sistematically check at the beginning of each lesson for attending students from abroad.
- ◆ Important concepts will be repeated in Italian.
  I concetti più importanti saranno ripetuti in Italiano

Questions will be answered in the language they will be asked in.

In all cases, raising your hand and asking for a translation will grant you one.

Alzate la mano e chiedete una traduzione, sarò contento di fornirla

Content of the course (1)

I part: Usability and Design

> Design approaches
>> System-oriented design
>> User-oriented design
>> Goal-oriented design
>
> User Experience Design
>
> Computer Interaction and dialog styles

II part: User-experience Design – Garrett's Model

- ◆ Strategy
- ◆ Purpose
- ◆ Structure
- ◆ Skeleton
- ◆ Surface

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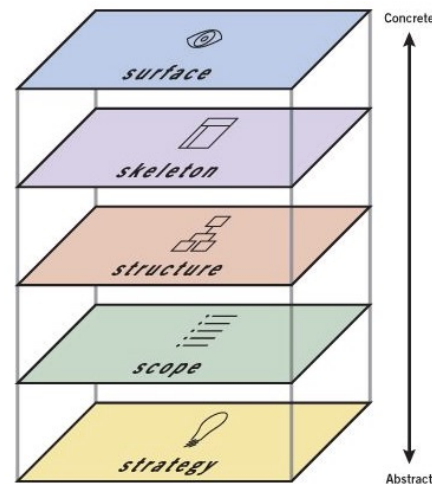
Content of the course (2)

III part: Human Beings:

- Physical characteristics
- Psychological characteristics

IV part: The design thinking / user experience design process

- ◆ Design principles
- ◆ Analysing tasks, goals, and users
- ◆ Designing interaction
- ◆ Analyzing the design
- ◆ Testing the design

V part: Prototyping the Future: Design Fiction and AI

- ◆ *Specifically meant for AI students (the others can attend, too)*

Prototyping the Future: Design Fiction and AI

A two-week extension of the base course explicitly aimed at students in Artificial Intelligence. All other students are welcome to join us. It will not be held if no AI student will be around by the corresponding period of time.

There is an additional "Project Work in User Experience Design" optional for interested AI students. Contact me in case you are interested

This extension will take place for one week in early November and one week just before Christmas. Course held in conjunction by me and Carlo Teo Pedretti, PhD student in Digital Humanities.

Prototyping the Future: Design Fiction and AI

How does artificial intelligence contribute to the design of future cultural artefacts and the shape of the world to come?

Define a shared vision of *design fiction(s)* as a methodology for researching futures within HCI: state of the art, *what-if* scenarios, diegetic prototypes and participatory design practices.

Understand the use of AI in HCI and design (fiction): creative writing, digital personas, generative design and AI-assisted design.

Discuss the role of combining *design fiction and AI* as an helpful tool to *a)* collect insights and formulate strategic directions for emerging industries and *b)* foster public policy-making processes.

The final exam

Every student has to BOTH take a written test AND present a design project.

1. The written test is individual, MUST be taken on the official test dates, and can be repeated at will until a satisfactory score is obtained. The written exam weighs 50% of the final score.

2. The project presentation is for small groups (2-3 people) (or individuals [*]), has no official test date (ask for an appointment), and can be repeated at will only by the group as a whole. The project presentation weighs 50% of the final score.

Written exams will be in presence in our labs at fixed dates.

Project presentations can be anytime and anywhere including online.

[*] Only students with **strong** justifications

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Language of the exam

The written tests will be made available in both Italian and English, and students can choose whichever of these two languages they prefer, and even switch halfway through.

Project presentation can be had in any of the two languages. I will start in Italian with Italian students and in English with foreign students, and will switch to the other language upon request.

Optional tasks

During the course, I will assign optional tasks to willing students.

- These tasks will require a little research, a little work, a few documents to be produced within a given deadline
- Everybody delivering complete submissions by the deadline will obtain some credits for the final grade.
- Best submissions will be selected (probably by you), and the submitter will obtain an even greater credit out of that.

Participating to these tasks is NOT required and you can safely ignore them.

But if you are willing to do a little more work, it will be appreciated.

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The written test

6/8 questions about the theoretical parts of the program.

Usually open text.

- ◆ E.g.: "What is Maslow's hierarchy of needs and how does it affect the design of a product?"

No exercises.

Each question has a different score weight that depends on perceived difficulty and length of providing an answer.

Written tests are provided ONLY on official test dates, no exceptions.

January, February, twice in June, twice in July, September.

Register individually to written tests, anytime you want, all the times you want.

Please take notice

This is NOT a course in programming interfaces. We discuss no languages, libraries, tools. If you are looking for these things, attend this course first, and then decide if you still want to be exposed to such level of detailed information.

This is a very talkative course. It is very easy to write things that seem appropriate, but are either trivially true or different from what I asked.

Pay attention to how specific and appropriate is what you write in your exam papers. Answer to the question asked.

Expected answer	Rejected answer
5 Example: *"how much is 2+3?"*	*Addition (usually signified by the plus symbol "+") is one of the four basic operations of arithmetic, the other three being subtraction, multiplication and division. The addition of two whole numbers results in the total amount or sum of those values combined.* *Besides counting items, addition can also be defined and executed without referring to concrete objects, using abstractions called numbers instead, such as integers, real numbers and complex numbers. Addition belongs to arithmetic, a branch of mathematics.* *The answers therefore is a number that is higher than both 2 and 3, and it lies somewhere between 0 and 1000 .*

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The project

You need to implement a group project (2-3 people). Individuals only in case of emergency or provable logistical difficulties.

In mid-November I will present the requirements for the end-of-course project.

There is also a specific implementation model that you have to follow and that will be presented on the same day.

No programming required, nor expected. This is a design course, not a technological one. Nonetheless, if you show up with a working prototype, I will not complain.

Two modes for the project

During the course

The project is split in three phases

- Phase I (specifications in early October, deadline late October): **Personas**
- Phase II (specifications in early November, deadline late November) **Feasibility Study**
- Phase III (specifications in early December, deadline at the exam [*]): **design and evaluation**

Pros and cons

- Pros: you finish the exam early
- Cons: you have to start working immediately and keep on working.

ONE exam date in December

- Project presentations and written exams.
- This is the only mode for students leaving Bologna before mid-January
- All other students are welcome to choose it, of course

After the course

The project is a single activity

- It has the same components as the ither one, **Personas, Feasibility study and Design and evaluation**
- Can be prepared any time between now and end of September 2024.

Pros and cons

- Pros: you can breathe and work at your pace.
- Cons: you have to wait for exam sessions (more or less).

No access to December date

- You have to wait for regular dates in January, February, June, July, September 2024
- Both project presentations and written exams.

The project presentation

You need to submit a set of documents on the day of the presentation. No advance submissions. No software.

◆ The number and names of these documents is predefined and strict

We then meet and discuss their content.

◆ *First part: the process* **–** what steps did you perform to obtain the result you obtained

◆ *Second part: the project* **–** can you convince the client to finance the design/redesign of their tool?

All team members are expected to contribute equally to the activities and work on all parts.

Divide tasks horizontally, not vertically.

Submission process for projects

During the course

Project is created during the semester and submitted in three installments on fixed dates.

You will receive non-improvable grades on each submission. Only projects that were successfully and timely submitted on each deadline will be allowed to be discussed in December.

You can drop out at any time and re-submit the **whole** project in any moment after January 2024.

Submissions on the day of the discussion on eol.unibo.it

After the course

Project presentations are allowed starting from January 2024, by appointment, until the end of September 2024.

Reservation for presentation slots must be made by email before September 1st.

From October 2024 onward you are expected to present next year's project (no exceptions!).

Submissions on the day of the discussion on eol.unibo.it

The 2023 UUXD project

The 2023 UUXD project

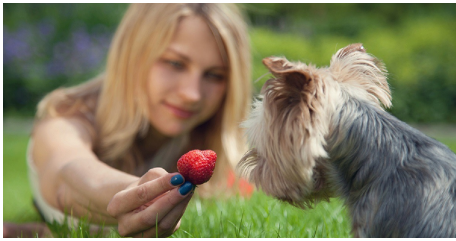Increase your users' interest, attention, motivation within a forced setting

Luring to task

Attrarre verso il task

LTT is the design/redesign of a web site / web application / mobile app / desktop application aimed a very specific audience that must use your tool but does not really care or want to use it.
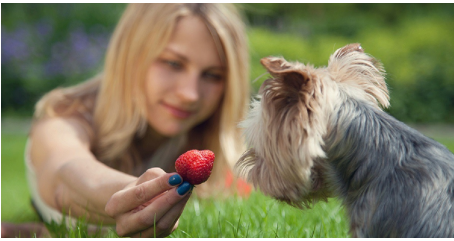
Luring to task

Understanding your audience and providing for a specific need or goal of your audience is a key for a successful product.

- *Products* (including applications, mobile apps and web sites) are succesful if they are designed for a clearly understood and specific audience.
- *Forced products* (including applications, mobile apps and web sites) are those that are the only available choice to carry out some task in a digital form. They are succesful if they they are able to be perceived as worthy and preferable to carrying out the same task by hand. This means making them clearly understood by a specific audience.

The impact (given by words, images, layout) is the main means of the delivering the reasons and ways to use proficuely your product.
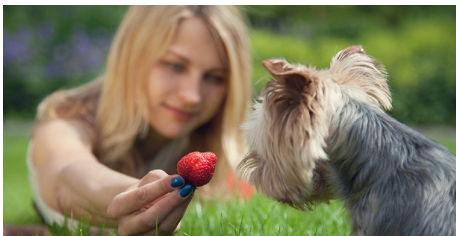
Luring to task

- You are tasked to improve the user experience of an existing service which is forced upon its users by specific reasons:
  - An application imposed by the employer to all employees.
  - A service that allows an organization to carry out some functions for their users (public administrations, banks, schools, etc.)
  - The only seller of an exclusive product not available elsewhere (a ticket for a theatre, a luxury item, etc.)
  - A tool imposed by a caretaker (parent, nurse, etc.) to their dependents.
- Each project will identify a specific situation, in a specific domain, and ***a very specific audience***, and create a web site / web application / mobile app / desktop application that supports the specific needs and goals and tasks of this audience.
- Careful and empathic understanding of their specific characteristics will be important. In November will suggest some domains, tasks and user types. I will also propose some functions and models.
- You can choose one of them, or suggest your own. You can make proposals under some rules.

Luring to task

You can suggest a domain+task+audience for your application, as long as you follow these steps:

- It addresses a very specific (and specified) domain
- It addresses one or a few of very specific (and specified) tasks
- It addresses one very specific audience, well identified and described.
- It shows the audience is *not free to use a different tool.*

    !! important requirement !!

- It shows you did your best to study, understand and empathize with this audience. You must evaluate how well you did.
- It clearly needs to provide a message to help/convince/assist that specific type of user to use it in carrying out tasks.
- The audience is not using your tool yet, and might be skeptical. You must inform it of its existence, usefulness, appropriateness.
- Please try to go beyond information sites, social networks and e-commerce tools.

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Assessment Criteria

Your project will be evaluated taking into account seven criteria. You can obtain 5 points for each, for a grand total of 35.

1. Relevance

    ◆ *Is the project addressing the right problems?*

2. Coherence

    ◆ *How well does the project fit with respect to similar external services?*

    ◆ *Is it internally coherent?*

3. Effectiveness

    ◆ *Is your redesign actually achieving its objectives?*

4. Feasibility

    ◆ *How well are resources being used?*

Assessment Criteria

Your project will be evaluated taking into account seven criteria.
You can obtain 5 points for each, for a grand total of 35.

5. Impact
   - ◆ *What differences does the project make?*

6. Sustainability
   - ◆ *Will the benefits last?*

7. Persuasiveness
   - ◆ *Is your design ultimately convincing?*

Readings of the course

- D. Norman, The Design of Everyday Things: Revised and Expanded Edition (2013) Basic Books
  Tr. it.: *La caffettiera del masochista*, Ed. Giunti.

- Jesse Garrett, The elements of user experience, New Riders, 2011

- Dix, Finlay, Abowd, Beale, *Human Computer Interaction*, 2004

- AA.VV. **Encyclopedia of Human-Computer Interaction, http://www.interaction-design.org/encyclopedia/**

- T. Tullis, B. Albert, Measuring the User Experience, Morgan Kaufmann, 2013

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Conclusions

Not a programming course

Not a Computer Science course, strictly speaking

Based on three keywords:

- ◆ creativity,
- ◆ documentation,
- ◆ evaluation

Nothing difficult, but lot of work anyway

Lot of fun too, I think.

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