Software Engineering
Human computer interaction

IDENTIFICATION

CODE : IFA-4-S2-EC-IHM
ECTS : 2.0

HOURS

Lectures : 8.0 h
Seminars : 0.0 h
Laboratory : 12.0 h
Project : 0.0 h
Teacher-student contact : 20.0 h
Personal work : 30.0 h
Total : 50.0 h

ASSESSMENT METHOD

Individual evaluation :
* Written exam (1h30, course materials allowed)
Team evaluation :
* QCM
* Report (one per team of 6 students)
* Project defense (per team of 6 students)

TEACHING AIDS

Slides on moodle

TEACHING LANGUAGE

French

CONTACT

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AIMS

The main goal of this course is for the student to acquire fundamental knowledge on Human-Computer Interaction and to develop competences for the design of interactive systems.
We will focus on human-centered methods for user interfaces, on the evaluation of user interfaces and interactive systems and on ergonomics.

This course targets the following skills:
* To enforce a methodology to design, implement and maintain quality software
* To enforce generic tools for software quality.
* To design the architecture of an object-oriented software

More precisely, at the end of this course, the student should be able to :
* Enforce a user-centered design process
* Evaluate an interactive system based on ergonomic criteria
* Develop an interface with respect to the principle of separation between the UI source code and the core application source code

CONTENT

* Fundamentals models and concepts in Human Computer Interaction
* Human centered design for interactive systems
- Methods to collect users'needs
- User, context and task modeling
- Prototyping
- Evaluation
* Ergonomics for conception and evaluation of interactive systems
* Mobility and innovation in HCI

BIBLIOGRAPHY

Jean-François NOGIER, Thierry BOUILLON, Jules LECLERC. Ergonomie des interfaces : Guide pratique pour la conception des applications web logicielles, mobiles et tactiles, Dunod, 5¿me ¿dition corrig¿e, ISBN978-2-10-059487-0, 298 pages, 2013.

PRE-REQUISITE

IFA-3-POO1, IFA-3-POO2, IFA-3-DASI