

Smart Objects

Basic Information

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Lecture 1



Instructors

1. Ioannis Chatzigiannakis
 - ▶ Computer Engineering, Distributed Computing, Internet of Things, Data Science.
 - ▶ Department of Computer, Control and Management Engineering (DIAG)
2. Alessio Paoletti
 - ▶ Emotional Design, Neuroscience and Design, Neurodesign, User Centered Design.
 - ▶ Department of Planning, Design, Technology for Architecture
3. Marco Zecchini
 - ▶ Distributed Ledger Technologies, Blockchain, Data Science, Internet of Things.
 - ▶ Department of Computer, Control and Management Engineering (DIAG)



Location & Time Schedule

- ▶ Made up of two modules:
 - ▶ Smart Objects – 6 CFU (ING-ING/05) – Ioannis + Marco
 - ▶ Open Design – 3 CFU (ICAR/13) – Alessio
- ▶ Laboratory takes place every Monday:
 - ▶ 11:30 – 13:30 – Smart Objects
 - ▶ 14:30 – 16:30 – Open Design
 - ▶ 17:00 – 19:00 – Smart Objects



Blended mode

- ▶ In-person and online classes:
 - ▶ In-person classes will take place in Classroom F7, via Flaminia, 70.
 - ▶ Online classes will take place using a fixed Google Meet virtual room:
<https://meet.google.com/esk-ydjp-uvr>
- ▶ Students in-person attendance booking system:
<https://prodigit.uniroma1.it>
- ▶ Make sure you follow all the Access & Safety Procedures:
<https://www.uniroma1.it/en/notizia/covid-19-phase-2-procedures-students-staff-and-guests>



Communication

- ▶ Via dedicated Slack Channel:
<https://sapienza2020so.slack.com/>
- ▶ Every Monday during lab hours.



Required Material

- ▶ Paper-roll, markers, crayons, highlighters, sticky notes, etc.
- ▶ Arduino Kit
 - ▶ Arduino Uno or similar
 - ▶ Starter Kit (e.g., Elegoo)



Coursework & Assignments

- ▶ During the semester you will deliver 3 assignments.
- ▶ For each assignment you will work in groups.
 - ▶ Each group will be made up from 3 students.
 - ▶ Different groups for each assignment.
- ▶ Each assignment is about creating a Smart Object:
 - ▶ Different shapes, materials, characteristics, functionalities.
 - ▶ Different sensors, actuators.
 - ▶ Different interaction and user experience.
- ▶ Each assignment is evaluated:
 1. Design: Analysis, Prototypes, Aesthetics.
 2. Research & Experimentation.
 3. Interaction, Technology & Integration.



Final Mark

- ▶ Each assignment is marked from 0 ... 6.
 - ▶ Each group will deliver 1 video of 5 minutes – **before the delivery day.**
 - ▶ During the delivery day you will need to present your work in 90 seconds.
 - ▶ Answer questions.
 - ▶ All marks are announced at the end of the day.
 - ▶ Each group gets 1 mark.
- ▶ Final exam
 - ▶ Students are examined individually.
 - ▶ Students may decide to try to improve one of the deliveries.
- ▶ Final mark
 - ▶ The 3 marks of each assignment.
 - ▶ +/- for participation during laboratories.
 - ▶ +/- from changes made during final exam.

