

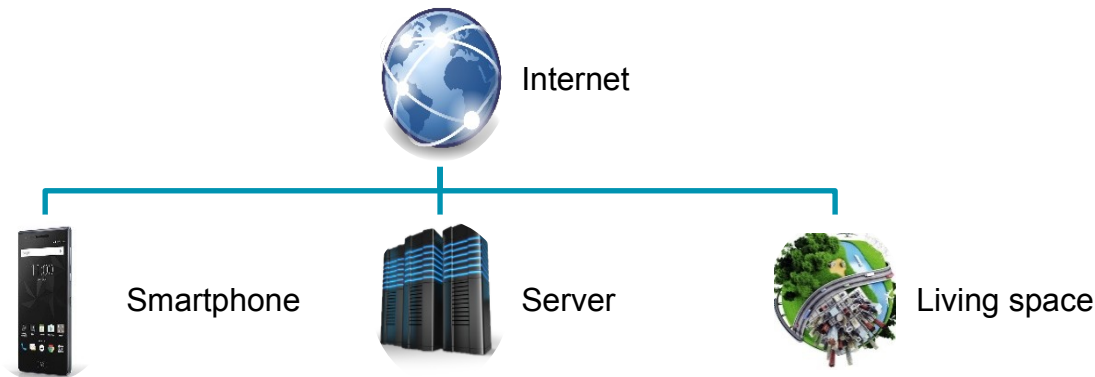


IMT Atlantique
Bretagne-Pays de la Loire
École Mines-Télécom

TAF DCL - ILSD

« SERVICES » TRACK

- ▶ Gain knowledge and skills in computer engineering to develop interactive applications
 - ▶ On mobile devices, on the Web, and in living spaces
- ▶ Capacity: 24 students





UE **SDSCH**
Distributed Systems and
Human-Centered
Services



UE **IAW**
Web applications
engineering



UE **MOBAPP**
Mobile applications
development

Distributed Systems and Human-Centered Services

SDSCH

Stakeholders:

Christophe LOHR (Head)

Issam REBAI

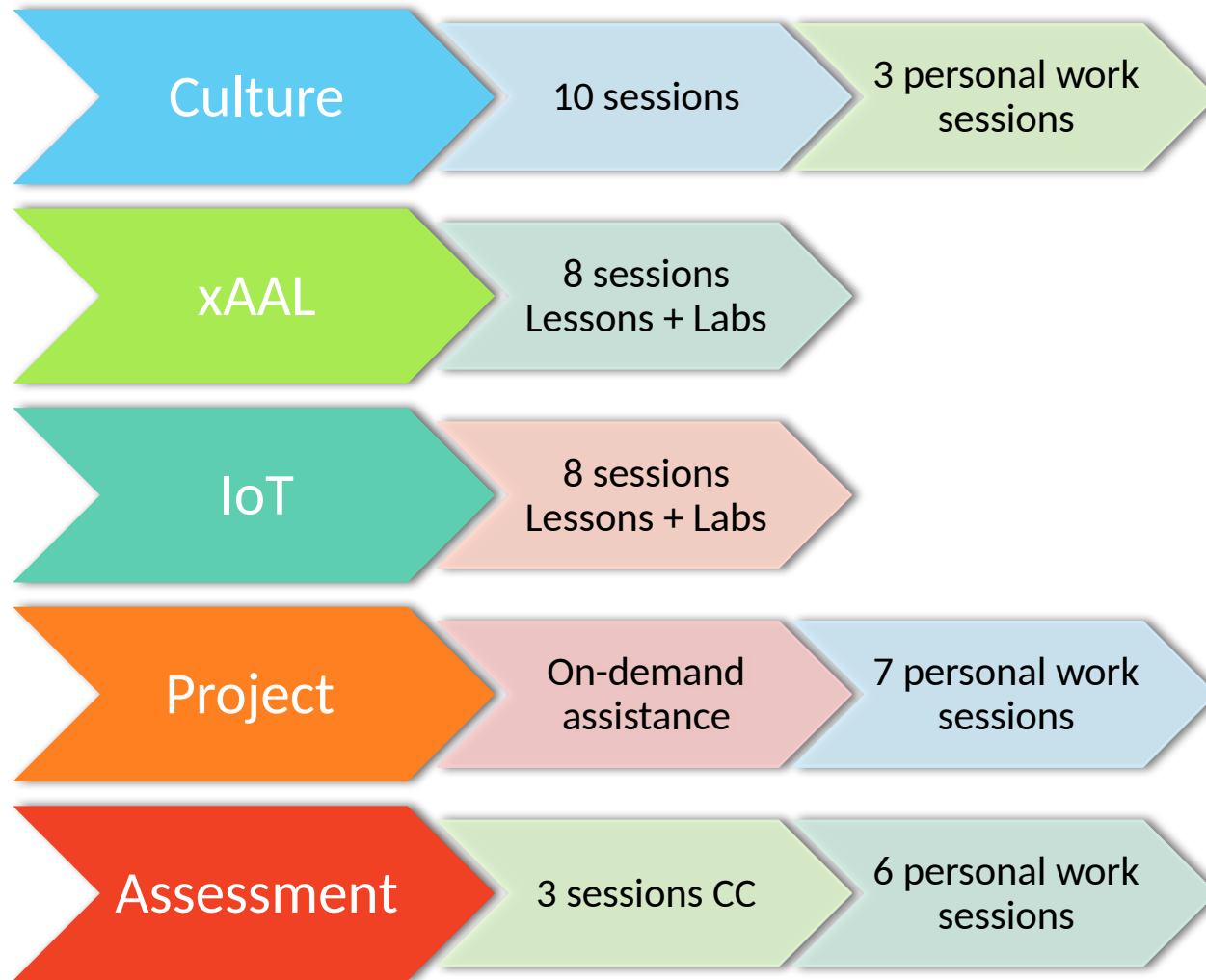
Jérôme KERDREUX

Slots F – Tuesday

[February-March]



- ▶ Acquire the relevant concepts and vocabulary in the field
- ▶ Understand the components and architecture of human-centered distributed systems
- ▶ Understand how protocol stacks work
- ▶ Know how to interact with devices
- ▶ Design and implement a device
- ▶ Participate in a debate about a subject of the domain



- ▶ Exercices and assignments specific to each theme
- ▶ Collaborative content to share
- ▶ Training courses using the “flipped classroom” approach
 - ▶ Students divided into two teams
 - ▶ A 1h15 training session provided by one team to the rest of the class and teachers
- ▶ Concrete project to be presented
 - ▶ Chose of one of two proposed working environments
 - ▶ Individual project with sharing of the scenario
 - ▶ Sharing artifacts among the whole class

Web applications engineering IAW

Stakeholders:

Issam REBAI (Head)
Mihai ANDRIES

Slots G – Wednesday
[February-March]



- ▶ Design and develop a dynamic Web application
- ▶ Apply best practices for Web application development
- ▶ Prevent « classic » security vulnerabilities in web applications
- ▶ Consider memory, processing time and sustainability when developing Web applications

- ▶ Contents
 - ▶ Client/Server architecture
 - ▶ LAMP stack
 - ▶ Symfony framework
- ▶ Practice
 - ▶ Create a website in pairs
- ▶ Assessment
 - ▶ Project defense + exam at the end of the course unit



Mobile applications development MOBAPP

Stakeholders:

Maria-Teresa SEGARRA (Head)
Thierry DUVAL

Slots H – Friday
[February-March]



- ▶ Explain the role and importance of the Android ecosystem used in mobile application development
- ▶ Follow the development chain of an Android application
- ▶ Develop a simple interactive application by applying basic design principles in terms of user interface and persistent data management
- ▶ Independently search for relevant resources for further Android development

- ▶ Designed as a set of themes that introduce key concepts
 - ▶ HMI, persistence, maps, sensors
- ▶ Practical activities (working in pairs) systematically
 - ▶ But course points can be covered during sessions to introduce new concepts
- ▶ Assessment
 - ▶ Oral presentation on the work of the pairs for most of the themes
- ▶ Website (formations.imt-atlantique.fr/introductionAndroid)
 - ▶ Support materials, schedule, evaluation criteria

« Services » Track



IMT Atlantique
Bretagne-Pays de la Loire
École Mines-Télécom

- ▶ Panorama d'applications utilisées tous les jours
- ▶ Avec une forte composante technologique
- ▶ La mise en pratique est fondamentale
- ▶

- ▶ Expérience de conception UML – Dérivation
- ▶ Connaissance des technologies et langages Web utilisés en Front-end
- ▶ Pratique de programmation en langage Java
- ▶ Pratique de gestion des BDR et du langage SQL
- ▶ Expérience avec les outils de gestion de version : Git