



Programming Paradigms and Languages



Teachers

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- ▶ **Meets students**
 - ▶ Monday 15-17

Training Goals

- ▶ To present and to compare different programming paradigms
- ▶ To present specific programming languages

Program

- ▶ **Programming paradigms**
 - ▶ General concepts and imperative paradigm
 - ▶ Functional paradigm
 - ▶ Examples of languages
 - ▶ LISP
 - ▶ Java 8
 - ▶ Logic paradigm and Prolog
- ▶ **Programming languages**
 - ▶ Client-side and server-side Web technologies
 - ▶ Client-side: JavaScript
 - ▶ Server-side: JEE

Caveat

- ▶ This course will propose a landscape of the programming paradigms and languages
 - ▶ We will not go into details of a specific language
- ▶ This course will show the practical aspects of the programming paradigms and languages
 - ▶ We will not study the theoretical aspects

Exam

- ▶ **6 CFU**
- ▶ **Project**
 - ▶ Single or group
 - ▶ Development using one or more studied language
 - ▶ See the course web site for more information
- ▶ **Presentation and discussion of the project**
 - ▶ Report
 - ▶ Project execution
- ▶ **Oral questions**

Material

- ▶ Course site:
- ▶ http://didattica.agentgroup.unimore.it/wiki/index.php/Paradigmi_e_Linguaggi_di_Programmazione

Reference texts

- ▶ **Teachers' slides**

- ▶ Thanks to prof. Enrico Denti of University of Bologna and to prof. Riccardo Lancellotti of University of Modena and Reggio Emilia

- ▶ **Books:**

- ▶ Maurizio Gabbrielli, Simone Martini, Linguaggi di programmazione - Principi e paradigmi, mcgraw-hill
- ▶ Raoul-Gabriel Urma, Mario Fusco, and Alan Mycroft, Java 8 in Action, Manning

- ▶ **Online**

- ▶ A lot of material