



COURSE PRESENTATION FORM – ACADEMIC YEAR 2010/2011

COURSE NAME	Programming Project
COURSE CODE	75004 (BSc New - DM 270) / 70008 (BSc DM 509 and BSc OLD)
LECTURER	Barbara Russo
TEACHING ASSISTANT	Bruno Rossi (EX IT), Maximilian Steff (EX DE)
TEACHING LANGUAGE	English
CREDIT POINTS	8
LECTURE HOURS	48
EXERCISE HOURS	24
OFFICE HOURS LECTURER	During the lecture time span, by appointment, Tuesdays, 14:00-16:00, Faculty of CS, POS Building, piazza Domenicani 3 , office 1.16
OFFICE HOURS TEACHING ASSISTANT	Bruno Rossi: Fridays, 17:00 – 19:00 (ITA), Faculty of CS, POS Building, piazza Domenicani 3 , office 1.10; Maximilian Steff: Mondays, 17:00 – 19:00 (ENG and GER), Faculty of CS, POS Building, piazza Domenicani 3 , office 1.09
PREREQUISITES	<ul style="list-style-type: none">• Basic understanding of how a program is written, compiled, and executed.• Syntax and informal semantics of Java.• Development solutions to simple problems in Java.
OBJECTIVES	Introducing a hands-on, project-oriented approach to Java-based software development.
SYLLABUS	<ul style="list-style-type: none">• Software process and project management in teams• Agile methods in practice• Review of object-oriented systems and methods across all the phase of development; the notion of classes and objects in the analysis, design, development and testing of software products• Tools for software development in Java• Configuration management• Code standards and agile documentation• Principles of debugging and testing• Unit testing• Modeling program execution with memory models to understand how a program is executed and compiled and to abstract the principles grounding the Java language



TEACHING FORMAT	Lectures plus exercises in laboratory
ASSESSMENT	<ul style="list-style-type: none">• Midterm evaluations (35%)• Oral exam (20%)• Project (45%)• All in one: Project (45%) and Oral exam (55%) <p>The positive project mark is valid for the three exam sessions</p>
READING LIST	<p>Lecture notes and papers will be handed out during the course.</p> <ul style="list-style-type: none">- Book reference for project management and development: R. S. Pressman Software Engineering – A Practitioner’s approach, sixth edition, McGraw-Hill. FUB Library Shelf: 15 ST 230 P935(6)- On-line reference for the development in Java: http://developers.sun.com/
SOFTWARE USED	<ul style="list-style-type: none">• Java compiler, to compile java classes• Eclipse, IDE platform to develop and manage the Java project• SVN, to share code in team• JUnit, to create unit tests• TRAC, for project management• Office/Open Office, to document software development• Fitnessse
PROJECT DESCRIPTION	<p>The project concerns a distributed card game where each team will develop its own implementation according to the requirements given at the beginning of the course. A software framework will invoke each implementation and let the customized version of each team play against each other. Although the winning implementation will get a bonus for the final mark in the course, the projects will be evaluated – among others - according to their design, proper requirements implementation, conformity to coding standards, and the proper application of the practices of development processes learned during the course.</p>
LEARNING OUTCOME	<ul style="list-style-type: none">• Understanding of the basic phases of the software lifecycle, and the methods development from requirement elicitation to code development and testing• Capability of identifying the key features of software projects and their effects in the selection of development methods• Ability of developing small size software projects in Java with an object oriented approach and working in teams• Understanding the role of tools in software development; management of integrated platform for development
COURSE PAGE	www.teleacademy.it