**POM 01 – Introduction**

*Introduction:*

Project management is a **problem solving activity**

* **Analysis**: Understand the problem nature and break the problem into pieces
* **Synthesis**: Put the pieces together into

*Summary of Polya‘s book:*

* **First**: understand the problem
* **Second**: devise a plan
* **Third**: carry out your plan
* **Fourth**: examine the solution obtained
* **Methodologies**: Collection of techniques, heuristics and tools uniﬁed by a philosophical approach
* **Techniques**: Formal procedures for producing results using some well-deﬁned notation
* **Heuristics**: Informal collection of steps
* **Tools**: Instruments or automated systems that help in accomplishing a technique or supporting heuristics

*Software project management:*

Project Management is a collection of techniques, methodologies, tools and heuristics that support the development of

* a **high quality software** system
* with a given **budget**
* before a given **deadline**
* **while change occurs (modern)**

**Management:**

getting a speciﬁc task done through people (planning, organizing, directing, controlling)

**Project management:**

is deﬁned in the context of a project (speciﬁc task, given deadline and budget)

**Software project management:**

is deﬁned in the context of software development

*Methodology:*

Provides guidance, general principles and strategies for selecting methods and tools in a given project environment in the context of change

* **costumer** (how much interaction with costumer?)
* **planning** (how much planning in advance?)
* **reuse** (how much reusing past solutions?)
* **modeling** (how much modeled before it is coded?)
* **process** (how much detail should the process be defined?)
* **project monitoring** (how often the work controlled and monitored?)

*Software project: workﬂows*

* Decision Making and Issue Tracking -> JIRA
* Meeting Management, Documentation, Collaboration -> Confluence
* Continuous Integration -> Bamboo
* Conﬁguration Management -> Bitbucket
* Continuous Delivery -> HockeyApp

*Problem solving techniques:*

* object-oriented analysis
* synthesis