

# Software Engineering and Architecture

## Agile Development Tools

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MASTER OF SCIENCE  
IN ENGINEERING

# Planning

Date		Theory	Practice
20.09.12	agile	<b>Introduction to agile &amp; scrum</b>	
27.09.12	agile	Agile development tools	Agile development tools
04.10.12	agile	User Stories	Guest speaker (Lotaris)
11.10.12	agile	The Product Owner	Presentations Agile Development Tools
18.10.12	agile	Lean Development	Guest speaker (Octo)

01.11.12	agile	Continuous Delivery	Lab
08.11.12	architecture	Development in and for the Cloud	Guest speaker (Cloudbees)
15.11.12	architecture	Behavior Driven Development (BDD)	BDD lab
22.11.12	architecture	BDD lab	BDD lab
29.11.12	evolution	Software Evolution	Guest speaker (Sonarsource)
06.12.12	evolution	OO Reengineering	Presentations BDD
13.12.12	evolution	Intro to Repository Mining Lab	Repository Mining Lab
20.12.12	evolution	Repository Mining Lab	Repository Mining Lab

10.01.13	architecture	Domain Specific Languages	Lab
17.01.13	architecture	The design of APIs	Guest speaker (Evrythng)
24.01.13	evolution	Repository Mining Presentations	Repository Mining Presentations

# Common needs of software development teams...

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- You need to **keep track of features** and **requirements**.
- You need a way to **manage your code base** and related **artifacts**.
- You need to **keep track of issues** and **bugs**.
- You need a way to **automatically build, test, deploy** your software.
- You need a way to **document** the various elements of your software and development process.



*keep track of features*



*manage your code base*



*document various elements*

# Atlassian

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- **Who is Atlassian?**

- A company established in 2002, which offers an **integrated suite** of software development tools.
- *“We are 400 geeks, beer drinkers, nerf herders, fraggers, and Wolverine-wannabes. Come on in and say hi.”*
- <http://www.atlassian.com/>

- **Why Atlassian?**

- The core projects, which include **Jira**, **Confluence** and **Greenhopper** are extensively used in the **industry** and in **open source communities**.
- The products can be deployed **on premise** or used **in the cloud**. Doing an **evaluation** is quick and easy.

# Atlassian Products

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## **Confluence** TEAM COLLABORATION

Collaboration tool for teams to create, share, and discuss rich content – docs, files, ideas, specs, diagrams, mockups, anything.



## **GreenHopper** AGILE PROJECT MANAGEMENT

Agile project management for Scrum or Kanban teams.

## **JIRA** TRACK, PLAN, ANALYZE

Project tracking for great product teams. Track anything – issues, bugs, tasks, deadlines, code, hours – to stay on top of every team's activity.



## **bitbucket** UNLIMITED GIT CODE HOSTING

Store all of your Git and Mercurial source code in one place, in the cloud, with free unlimited private repositories. Includes issue tracking, wiki, and pull requests.

## **Bamboo**

### CONTINUOUS INTEGRATION

Continuous integration, continuous deployment, and release management.

## **FishEye**

### BROWSE & SEARCH CODE

Browse, search, and track your source code repositories.



# Instructions for next week (1)

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- **Explore the online documentation & demo (1 hour):**
  - Watch the **JIRA demo** (23:32) at <http://www.atlassian.com/software/jira/demo>.
  - Explore the **Jira** and **Greenhopper** pages. When you read the description of the features, think about what we have seen about **Scrum**.
  - Go through the **Confluence** pages on the web site.
- **Register and setup an evaluation account (hosted)**
  - You can evaluate **Confluence**, **Jira** and **Greenhopper** for free, using their **OnDemand offering**. You need to provide credit card information, but if you cancel your subscription you will not be charged.
  - Doing a **local installation** takes about 15 minutes and is also possible.

# Instructions for next week (2)

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- Prepare a 15' **presentation** focusing on Greenhopper (and Jira), with a **demo**:
  - Imagine that you have to **convince your management** that Greenhopper will be useful for your team.
  - Explain the **product concepts** and show how they work.
  - Note : your management may not be very familiar with Scrum, so you need to capture the essence of the process in your talk).
  - Think of a **demo scenario** and prepare some data (you'll need to show a **backlog, story cards, charts**, etc.).
  - You may also look for some **open source projects** that use Jira & Greenhopper to have some data.
- **We will listen to a few of your presentations on October 11th.**