UNIVERSITY OF NICOSIA
ΠΑΝΕΠΙΣΤΗΜΙΟ ΛΕΥΚΩΣΙΑΣ

COMP 114 – Software Development Lab II
Software Development Tools

Instructor: Dr. Gjermundrød

Lecture Outline

- The Software Development Lifecycle
- Scenario 1: Subversion
- Scenario 2: Bugzilla
- Scenario 3: LuntBuild
- How it All Fits Together

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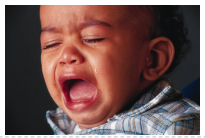
The Software Development Lifecycle

- Request from customer
- Design and architecture of product
- The development cycle starts
- We want and NOT 

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The Software Development Lifecycle (Cont.)

- To ensure success software companies use tools when building products

- In Programming I and II you learn how to use the "hammer"
- In Software Lab I and II you learn how to become a professional constructor. That can build real houses that people can live in.

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The Software Development Lifecycle (Cont.)

- What are the tools we will learn how to use:
  - Integrated Development Environment: Eclipse
  - Version Control System: Subversion (SVN)
  - Bug Tracking System: Bugzilla
  - Continuous Integration: LuntBuild
- Why do we need to learn them?

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Scenario 1: Subversion

- Scenario 1:
  - A team of 5 are writing the software.
    - 2 are located in Cyprus
    - 1 located in Greece
    - 2 located in USA
  - How do the work on the same files at the same time?

How do we share the source files?

2 Developers in Cyprus | 1 Developer in Greece | 2 Developers in USA

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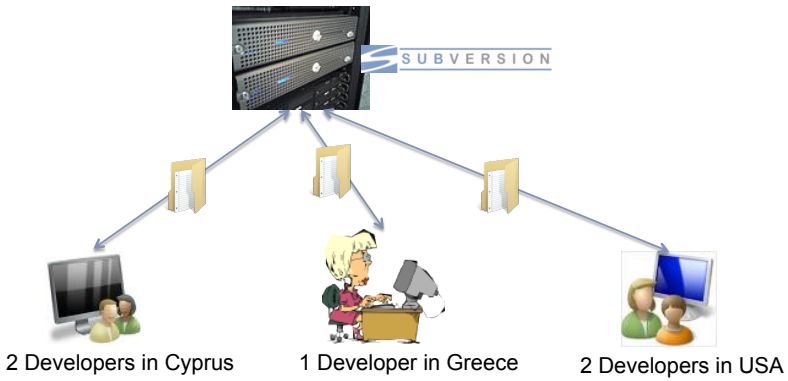
Scenario 1: Subversion (Cont.)

- Subversion can be solution to scenario 1

Server with Subversion that hosts the source files



2 Developers in Cyprus | 1 Developer in Greece | 2 Developers in USA

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Scenario 2: Bugzilla

- Scenario 2:
  - Product is given to 5 test users
  - How does the test users report their experience with the software?
  - How does the developer inform the test users about updates/ fixes?

Bug Fixer

How does the test users inform the Bug Fixer

Test User 1 | Test User 2 | Test User 3 | Test User 4 | Test User 5

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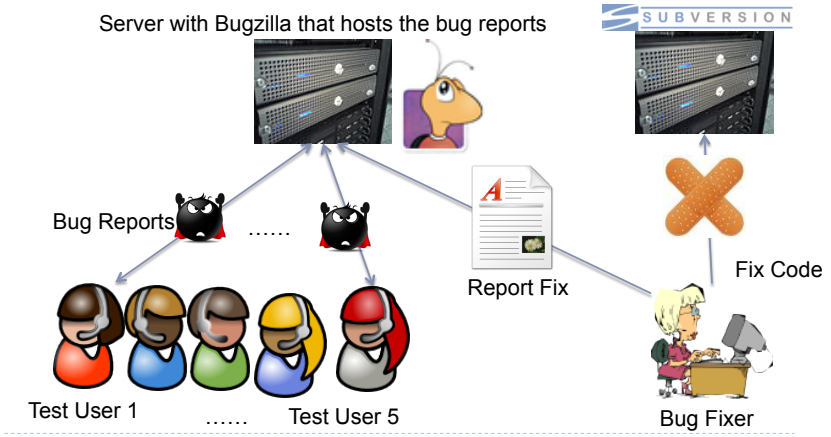
Scenario 2: Bugzilla (Cont.)

- Bugzilla can be solution to scenario 2



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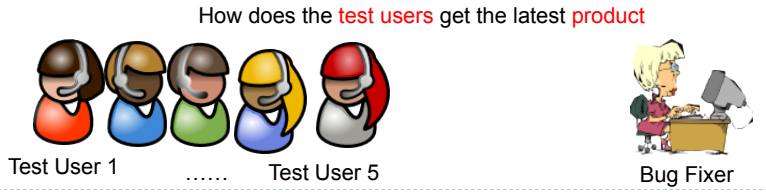
Scenario 3: LuntBuild

- Scenario 3:
  - A team of 5 are writing the software
  - Product is given to 5 test users
  - The developers are continuously fixing bugs and updating the product
  - How can the test users obtain the latest "test release" of the product?



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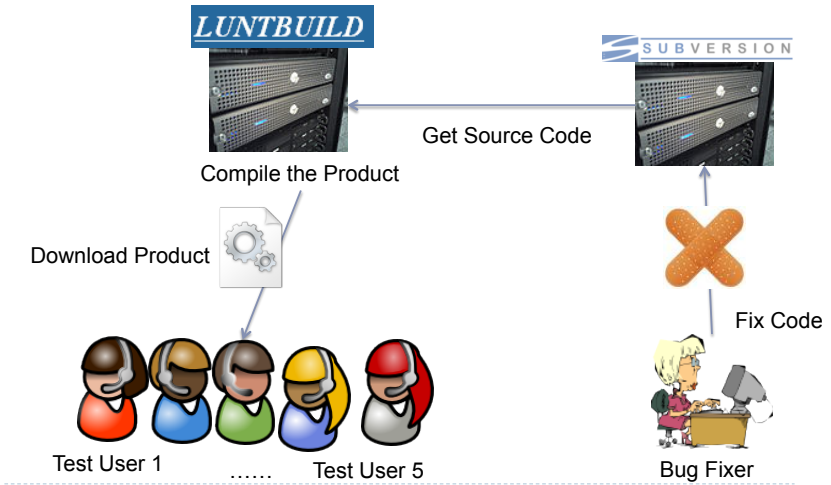
Scenario 3: LuntBuild (Cont.)

- LuntBuild can be solution to scenario 3



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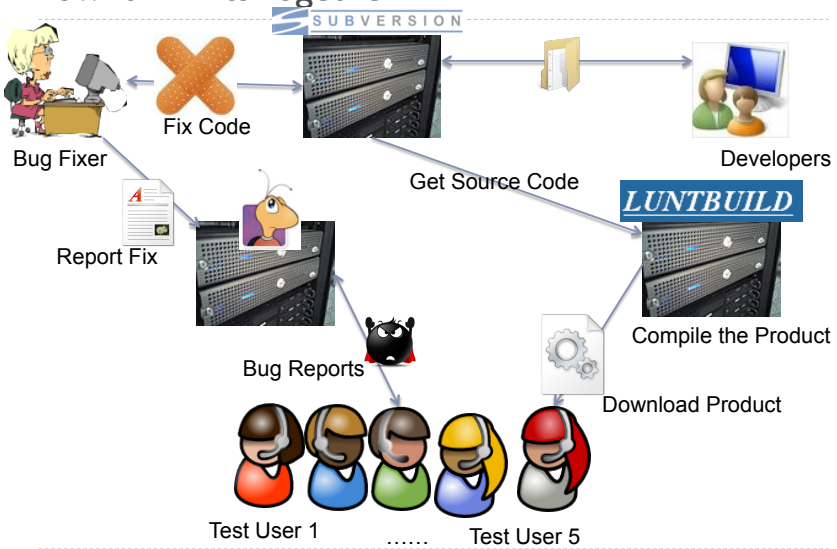
How it All Fits Together



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