

# Contributing to Open Source Projects



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# Contributing Agenda

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- Learning about a Project
- Using a Project
- Joining Project's Community
- Becoming Contributor
- Q/A

# Learning about a Project

- WebSite
  - > <http://www.netbeans.org/community>
- Getting the sources
  - > Sources hosted in *Mercurial* versioning system
    - > <http://www.selenic.com/mercurial/>
- Reading documentation
  - > <http://platform.netbeans.org>
- Playing with the project
  - > Download NetBeans IDE
  - > Create a new module

# Using a Project

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- Build sources  
ant build
- Running  
ant -f nbbuild/build.xml tryme
- Patching
  - > enough to build the affected module  
cd core.windows  
ant clean netbeans
- Use support from some IDE

# Joining Project's Community

- Subscribe to mailing lists
  - > <http://www.netbeans.org/community>
  - > answer questions
- Report bugs and patches
  - > find issue tracking systems
  - > learn about release cycles
  - > insist on bugs being fixed
- Become known in the community
  - > asking questions & showing progress

# Becoming Contributor

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- Writing Tutorials
- Fixing on enhancing wiki
  - > <http://wiki.netbeans.org>
- Answering on mailing list
- Spreading the Word
  - > blogging
- Engineers Contribute Code

# Engineers Contribute Code

- Building Applications
  - > converting apps to NetBeans
  - > building on top of Platform or IDE
  - > no quality criteria
  - > no release cycles
  - > sandbox at <http://contrib.netbeans.org>
- Publishing via Autoupdate
  - > Plugin Portal: <http://plugins.netbeans.org>
  - > publish from contrib



# Engineers Contribute Code II

- Fixing Bugs
  - > There are always enough bugs :-)
  - > Fastest way to learn about a project
  - > Quality criteria
    - > Attach a patch to a bug report in Issuezilla
  - > Continuous builds
    - > <http://deadlock.netbeans.org>



# What is an API?

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- Public vs. implementation packages
- Extension points
  - > Lookup registrations and discovery
  - > Layer registrations and reading
- Properties and Env variables
- Localization messages
- Files being read
- Open sockets

# Engineers Contribute Code III

- Architecture Changes
  - > Open API Review process
    - > <http://openide.netbeans.org/tutorial/reviews/>
  - > Fast vs. standard review
  - > Need for a test case
  - > Proper documentation
    - > <http://openide.netbeans.org/tutorial/api.html>
    - > updating module versions
  - > Heavily influenced by schedule

# DEMO

- Suggesting an API change

# Conclusion

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- Know your project
- Engineers write code
  - > on top
  - > patches
  - > architecture changes
- Deal with the community
- Select your Exam Project