

Software Development Tools

IDEs Revision Control Using GitLab and Git

Introduction to Software Systems 1110/1140/6710





Integrated Development Environments

- A rich context for software development
 - Examples: Eclipse, IntelliJ, VisualStudio, XCode
- Syntax highlighting, continuous compilation, testing, debugging, packaging
- Powerful refactoring capabilities



Revision Control

- Indispensible software engineering tool
- Solitary work
 - Personal audit trail and time machine
 - Establish when bug was introduced
 - Fearlessly explore new ideas (roll back if no good)
- Teamwork
 - Concurrently develop
 - Share work coherently







Git

- Distributed version control system
 - hg, git, others (conceptually very similar)
- · Contrast with centralized version control
 - cvs, svn, others

We will focus on distributed version control systems and not discuss centralized version control any further.





Git & GitLab **S1**

Git & GitLab comp1110 / comp1110-labs 0.000+00 COMP1110 Lab 1 comp1110 / comp1110-labs 0.000 + 00 Purpose COMP1110 Lab 1 The first lab is intended to ensure that you have become familiar with the basic tools we will be using throughout the connector is the labe of AMI and on user even connector (if you also be use even) It is essential that you complete this lab and have a tutor mark it off. We want you to do this now so that you Purpose It is essential that you compete this als and have a tubor mark it cer. We want you to do that now is that you can focus on course content from the first day of week two rather than be distanced by concerns over how the tools work. This is your chance to get youniell established and familiar with the tools with the assistance of the push / pull comp1110 / comp1110-labs 0.005+00 The first lab is intended to ensure that you have become familiar with the basic tools we will be using throughout course tutors. 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IntelliJ Git Integration

- Create a new repository:
 - VCS->Import into Version Control->Create Git Repository...
- Clone an existing repository:
 - VCS->Checkout from Version Control->Git…
- Other operations:
 - VCS
 - VCS->Git
 - right mouse click -> Git

