



## Java IDE - IntelliJ



### Why use an IDE?

We don't need to use an IDE to write Java applications. We can write them in any text editor and compile them manually using **javac**:



It reality its almost impossible to do anything serious without an IDE.



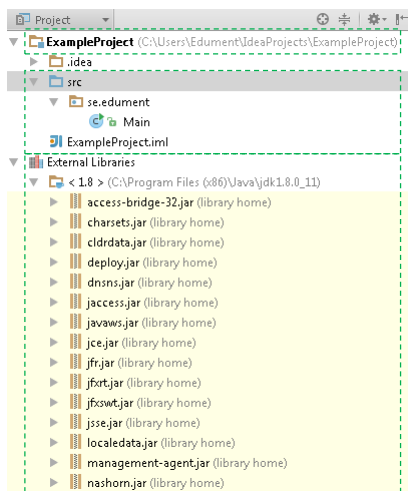
## Some Java IDEs

There are many different IDEs that can be used for Java development.

- **IntelliJ IDEA** by JetBrains.
  - Free community edition available.
  - Ultimate edition with advanced features also available.
  - Google's Android Studio based on this.
  - We will be using IntelliJ in this course
- **Eclipse** by the Eclipse Foundation.
  - Free, open source community developed IDE.
  - The most popular IDE for Java programming.
- **NetBeans** by Oracle.
  - Oracle own Java.
  - Free, open sourced IDE.
  - Often used for desktop software as it has a great GUI design tool.



## IntelliJ IDEA – Project window



### Project

**Projects** are containers that contain all of the code and other elements that make up an application.

### Files and Folders

Every project contains your source code and other files

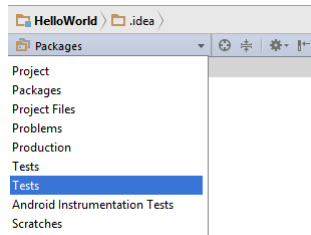
### Libraries

Libraries are collections of code others have written that you can use in your project. These listed here are those that come with the JDK.



## Project window - Views

The project window contains many different views

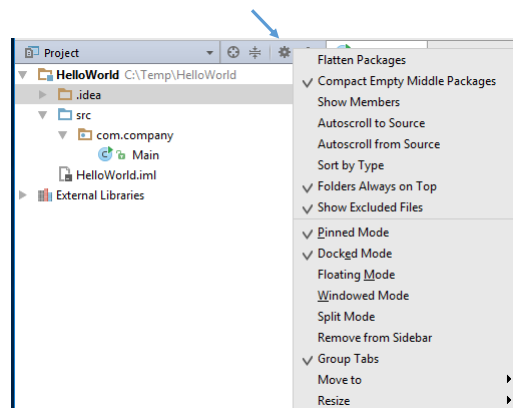


- **Project**  
Shows all project items
- **Packages**  
Shows the package structure
- **Scratches**  
With this feature you can sketch something really quick right in the editor, without modifying your project or creating any files

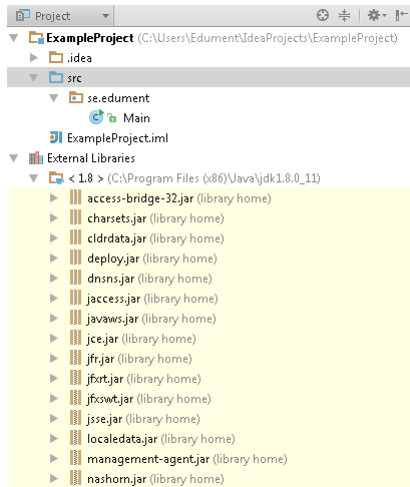


## Project window - Configuration

The project window The project window have many configuration options:



## IntelliJ IDEA – Project window



Some rules and facts:

- You can only work on one project at a time per IntelliJ instance.
- You can, however, have as many IntelliJ windows open as you want, each managing separate projects.



## IntelliJ IDEA – Project structure

If we create a simple hello world application, then the following files are created:

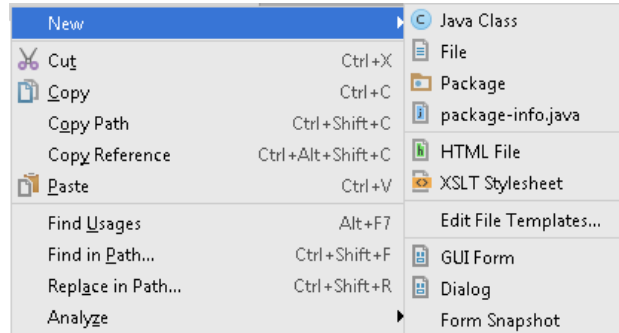
This PC > Local Disk (C:) > Temp > HelloWorld			
<input type="checkbox"/> Name	Date modified	Type	
<input type="checkbox"/> .idea	7/31/2016 12:47 PM	File folder	
<input type="checkbox"/> out	7/31/2016 12:36 PM	File folder	
<input type="checkbox"/> src	7/31/2016 12:11 PM	File folder	
<input type="checkbox"/> HelloWorld.iml	7/31/2016 12:11 PM	IML File	

- **\.idea**  
Contains all the project specific settings (Not all files here should be in source control)
- **\Out**  
Contains compiled class files
- **\Src**  
Your source code.
- **HelloWorld.iml**  
A IML file is a file created by IntelliJ IDEA and it stores information about a module.



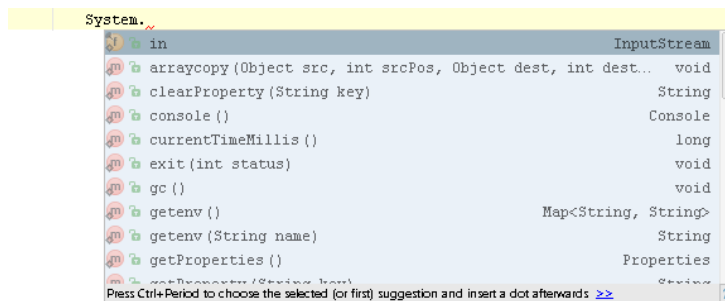
## IntelliJ IDEA: File templates

Automatically create Java specific files, which often include the template code the files always need.



## IntelliJ IDEA: IntelliSense

**Auto-completion** and hints on types, methods and parameters when writing code.



## IntelliJ IDEA: Help

If you ever get confused when using IntelliJ IDEA, just push the **F1 key** on your keyboard and the IntelliJ web help will open.

Additional resources:

- IntelliJ documentation and tutorials  
<https://www.jetbrains.com/idea/documentation/>
- JetBrains.tv – online video tutorials  
<https://www.jetbrains.tv>



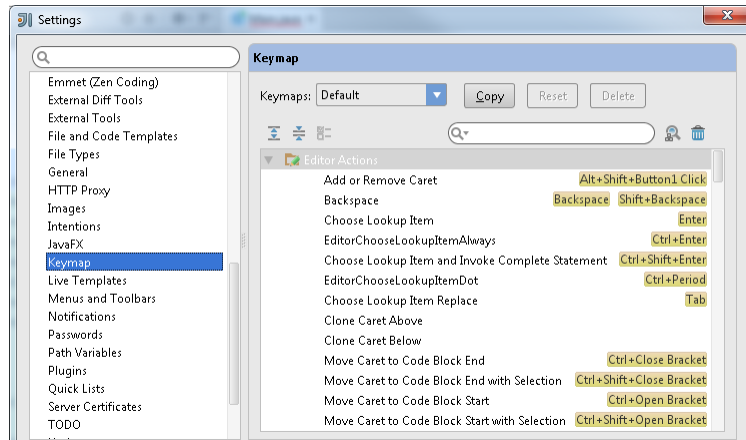
## Become a better developer

Learn to type without looking!



Become a better developer

Learn your IDE's shortcuts!



## Exercise 2

Let's do exercise 2

