## 27 Eclipse Shortcut Keys for Code Editing

When using an IDE, you cannot be more productive without using its shortcut keys frequently as your habit. In this article, we summarize a list of shortcut keys which are useful for editing Java code in Eclipse IDE.

NOTE: Standard shortcuts are not covered, such as Ctrl + A (select all), Ctrl + Z (undo), etc.

- 1. **Ctrl + D**: Deletes current line.
- 2. Ctrl + Delete: Deletes next word after the cursor.
- 3. Ctrl + Shift + Delete: Deletes from the cursor until end of line.
- 4. **Ctrl + Backspace:** Deletes previous word before the cursor.
- 5. **Shift + Ctrl + y:** Changes a selection to lowercase.
- 6. **Shift + Ctrl + x:** Changes a selection to uppercase.
- 7. **Alt + Up Arrow**: Moves up current line (or a selected code block) by one line:

```
public Employee(int id, String name, String address) {
    this.id = id;
    this.address = address;
    this.name = name;
}

Alt + Up
```

8. **Alt + Down Arrow**: Moves down current line (or a selected code block) by one line:

```
public Employee(int id, String name, String address) {

this.id = id;
this.name = name;

this.address = address;
}

Alt + Down

this.address = address;
}
```

9. **Ctrl + Alt + Up Arrow:** Copies and moves up current line (or a selected code block) by one line:

```
public Employee(int id, String name, String address) {
    this.id = id;
    this.name = name;
    this.address = address;
    this.address = address;
}

Ctrl + Alt + Up
```

10. **Ctrl + Alt + Down Arrow:** Copies and moves down current line (or a selected code block) by one line:

```
public Employee(int id, String name, String address) {
    this.id = id;
    this.name = name;
    this.address = address;
    this.address = address;
}

Ctrl + Alt + Down

this.address = address;
}
```

11. **Shift + Enter:** Inserts a blank line after current line, regardless where the cursor is at the current line (very different from press **Enter** key alone):

```
public Employee(int id, String name, String address) {
    this.id = id;
    this.name = name;
    Shift + Enter

this.address = address;
}
```

- 12. **Ctrl + Shift + Enter:** works similar to the **Shift + Enter**, but inserts a blank line just before the current line.
- 13. **Ctrl + Shift + O:** Organizes import statements by removing unused imports and sorts the used ones alphabetically. This shortcut also adds missing imports.

```
5 import org.springframework.beans.factory.annotation.Autowired;
  6 import org.springframework.stereotype.Controller;
  7 import org.springframework.web.bind.annotation.ModelAttribute;
  8 import org.springframework.web.bind.annotation.RequestMapping;
  9 import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.bind.annotation.ControllerAdvice;
 11 import org.springframework.web.servlet.ModelAndView;
 12

№13 import java.util.List;

                                           Ctrl + Shift + O
№14 import java.util.ArrayList;
                                           to remove these
 15
 16 import com.ava.hr.dao.EmployeeDAO;
                                           unused imports
 17 import com.ava.hr.dao.UserDAO;
 18 import com.ava.hr.model.Employee;
 19 import com.ava.hr.model.User;
```

14. **Ctrl + Shift + M:** Adds a single import statement for the current error due to missing import. You need to place the cursor inside the error and press this shortcut:

```
@RequestMapping(value="/")
public ModelAndView viewIndex() {
    ModelAndView model = new ModelAndView("index");
    model.addObject("user", new User());
    return model;
}

Ctrl + Shift + M to add import for the User class
```

15. **Ctrl** + **Shift** + **F**: Formats a selected block of code or a whole source file. This shortcut is very useful when you want to format messy code to Java-standard code. Note that, if nothing is selected in the editor, Eclipse applies formatting for the whole file:

```
9 public class EmployeeDAO {
10 private SessionFactory sessionFactory;
12⊖
           public EmployeeDAO(SessionFactory sessionFactory) {
13
           this.sessionFactory = sessionFactory;
       }
14
15
16⊝
       @Transactional
17 public void save(Employee employee)
19
        Session session = sessionFactory.getCurrentSession();
20
           session.save(employee);
       }
                                     Ctrl + Shift + F to format
23
24 }
                                    this messy code
25
```

16. **Ctrl** + **I**: Corrects indentation for current line or a selected code block. This is useful as it helps you avoid manually using **Tab** key to correct the indentation:

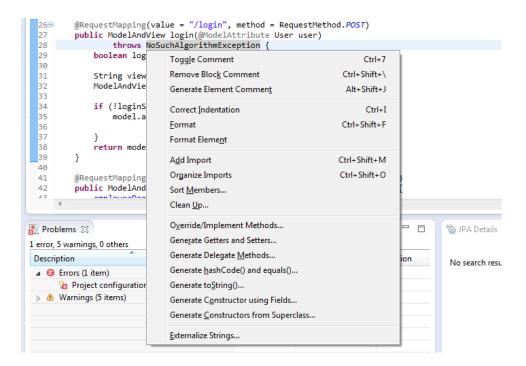
- 17. **Ctrl +A, Ctrl+ I:** Corrects indentation for hold page.
- 18. **Ctrl** + /or **Ctrl** + 7: Toggle single line comment. This shortcut adds single-line comment to current line or a block of code. Press again to remove comment. For example:

```
3⊕ import org.hibernate.Session;
9 public class EmployeeDAO {
%10
        private SessionFactory sessionFactory;
 11
 12⊖
        public EmployeeDAO(SessionFactory sessionFactory) {
 13
            this.sessionFactory = sessionFactory;
 14
 15
 16 // @Transactional
 17 // public void save(Employee employee) {
 18 //
           Session session = sessionFactory.getCurrentSession();
 19 //
    //
 20
            session.save(employee);
 21 // }
                          Ctrl + / or Ctrl + 7
 22
23 }
 24
```

- 19. Ctrl + \: Single line comment.
- 20. Ctrl + Shift + /: Adds block comment to a selection.

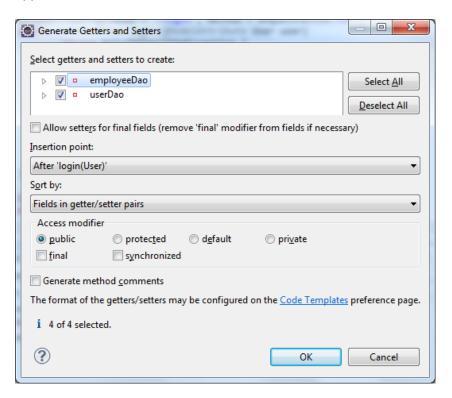
```
public class EmployeeDAO {
10
       private SessionFactory;
11
12⊝
        public EmployeeDAO(SessionFactory sessionFactory) {
13
           this.sessionFactory = sessionFactory;
 14
15
16 /* @Transactional
 17
       public void save(Employee employee) {
18
           Session session = sessionFactory.getCurrentSession();
 19
 20
           session.save(employee); Ctrl + Shift + / to
 21
                                  add a block comment
 22
 23
 24
```

- 21. Ctrl + Shift + \: Removes block comment.
- 22. **Alt + Shift + S:** Shows context menu that lists possible actions for editing code:

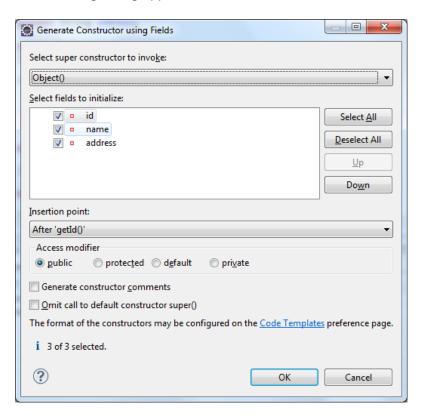


From this context menu, you can press another letter (according to the underscore letters in the names) to access the desired functions.

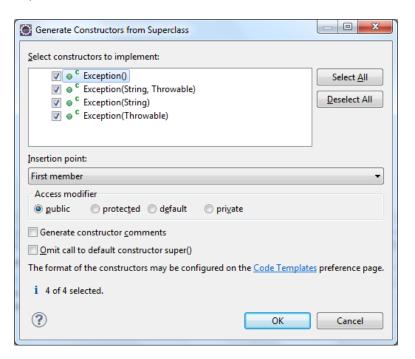
23. **Alt + Shift + S, R:** Generates getters and setters for fields of a class. This is a very handy shortcut that helps us generate getter and setter methods quickly. The following dialog appears:



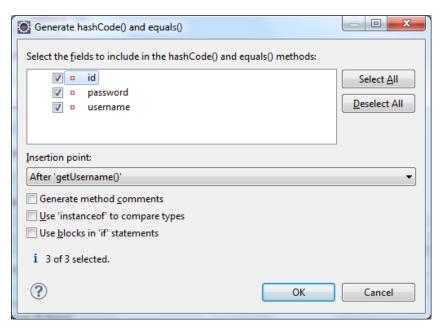
24. **Alt + Shift + S, O:** Generates constructor using fields. This shortcut is very useful when you want to generate code for a constructor that takes class' fields as its parameters. The following dialog appears:



25. **Alt + Shift + S, C:** Generates Constructors from Superclass. A common example for using this shortcut is when creating a custom exception class. In this case, we need to write some constructors similar to the Exception superclass. This shortcut brings the *Generate Constructors from Superclass* dialog which allows us to choose the constructors to be implemented in the subclass:



26. **Alt + Shift + S, H:** Generates <a href="hashCode">hashCode</a>() and equals</a>() methods, typically for a JavaBean/POJO class. The class must have non-static fields. This shortcut brings the Generate hashCode() and equals() dialog as below:

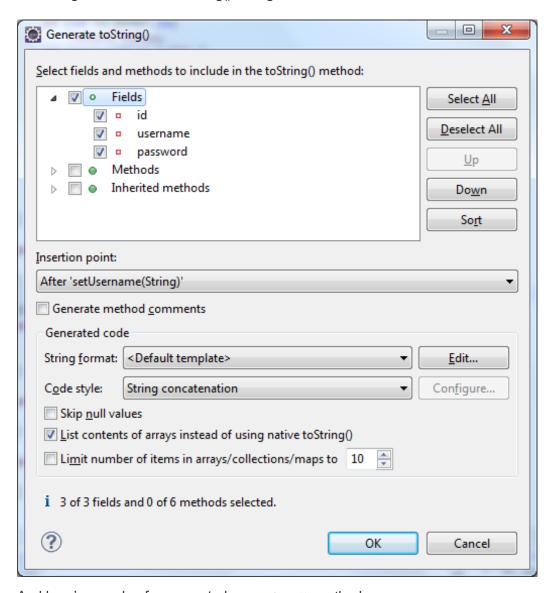


Select the fields to be used in hashCode() and equals() method, and then click OK. We got the following result (example):

```
@Override
1
     public int hashCode() {
2
         final int prime = 31;
3
         int result = 1;
         result = prime * result + id;
4
         result = prime * result
5
                 + ((password == null) ? 0 : password.hashCode());
6
         result = prime * result
7
                  + ((username == null) ? 0 : username.hashCode());
8
         return result;
9
10
    @Override
11
    public boolean equals (Object obj) {
12
         if (this == obj)
13
             return true;
14
         if (obj == null)
             return false;
15
         if (getClass() != obj.getClass())
16
             return false;
17
         User other = (User) obj;
18
         if (id != other.id)
             return false;
19
         if (password == null) {
20
             if (other.password != null)
21
                  return false;
22
         } else if (!password.equals(other.password))
23
             return false;
         if (username == null) {
24
             if (other.username != null)
25
                  return false;
26
         } else if (!username.equals(other.username))
```

```
27 return false;
28 return true;
29 }
```

27. **Alt + Shift + S, S:** Generates <u>tostring()</u> method. This shortcut comes in handy if we want to override <u>tostring()</u> method that returns information of relevant fields of the class. This brings the *Generate toString()* dialogas below:



And here's sample of a generated toString() method: