

## Interface segregation principle

A client should never be forced to implement an interface that it doesn't use or clients shouldn't be forced to depend on methods they do not use.

e.g.

```
interface MouseAllListener
{
    void mouseClicked(MouseEvent e);
    void mouseEntered(MouseEvent e);
    void mouseExited(MouseEvent e);
    void mousePressed(MouseEvent e);
    void mouseReleased(MouseEvent e);
    void mouseDragged(MouseEvent e);
    void mouseMoved(MouseEvent e);
}
```

A programmer would like to handle events related to mouse, must implement the above interface and define all its methods. However, if a programmer is not interested in drag or move events why he should implement those methods? On the other hand, if a programmer wants to handle only drag or move events for him other methods don't make any sense.

Solution:

```
interface MouseListener
{
    void mouseClicked(MouseEvent e);
    void mouseEntered(MouseEvent e);
    void mouseExited(MouseEvent e);
    void mousePressed(MouseEvent e);
    void mouseReleased(MouseEvent e);
}
```

```
interface MouseMotionListener
{
    void mouseDragged(MouseEvent e);
    void mouseMoved(MouseEvent e);
}
```