# **EclEmma** (source code coverage measurement)

<u>Execution</u>: Project, right click on the class or test method name > *Coverage As > JUnit Test* Results:

- Coverage tab (detailed results)
- Code coloring:
  - Green (covered)
  - Yellow (partially covered)
  - Red (not covered)

# Navigation:

• Jump to a specific item in the code: double left click on the items in the Coverage tab

**Atlas** (call graph, control and data flow graphs, etc.)

## Execution: automatic

## Results:

- Atlas Smart View tab
  - o Call: call graph
  - Control Flow: control flow graph
  - o Data Flow: data flow graph
  - o Declarations: declaration information
  - o Instantiation: instantiation information
  - o References: reference information
  - o *Type Hierarchy*: type hierarchy

#### Navigation:

- Zoom: mouse scroll wheel
- Move: by holding down the right mouse button and moving the mouse
- Jump to a given element in the code: double-click on the nodes of the graph

**iFL** (interactive fault localization)

#### Execution:

- 1. Select project > Click on iFL icon or iFL menu > Start iFL session
- 2. Load scores... > select the right CSV > Open
- 3. Show ordering list > Move Score to the right > click on the arrow next to Score (down arrow == descending order)

# Results:

• list of methods in the *Interactive Fault Localization* tab

#### Navigation:

- Jump to a specific element in the code: double-click on the method cards
- Score modification: select method(s) cards with left click > right click on selection >
  Context based feedback > set the desired values > OK