Software Testing

Efficient Algorithm for Recommendation of Data Visualization Tools

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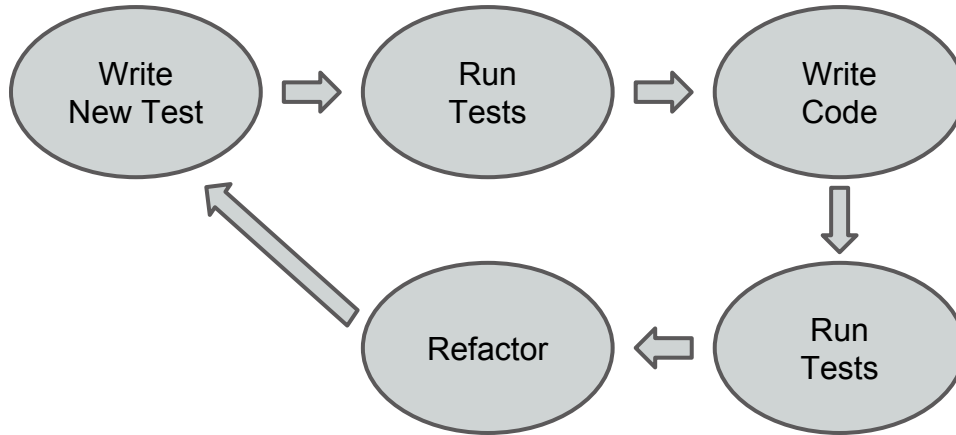**Supervisor**
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Testing Strategy

- Unit Testing
- Integration Testing
- Validation and Verification Testing
- System Testing

Unit Testing

Write
New Test → Run
Tests → Write
Code

Refactor ← Run
Tests

(cycle: Write New Test → Run Tests → Write Code → Run Tests → Refactor → Write New Test)

Test functions and procedures of all units.

Some of the units:
- Data reader
- Properties reader
- Level of measurement calculator

JUnit

http://www.softwaretestinghelp.com/unit-testing
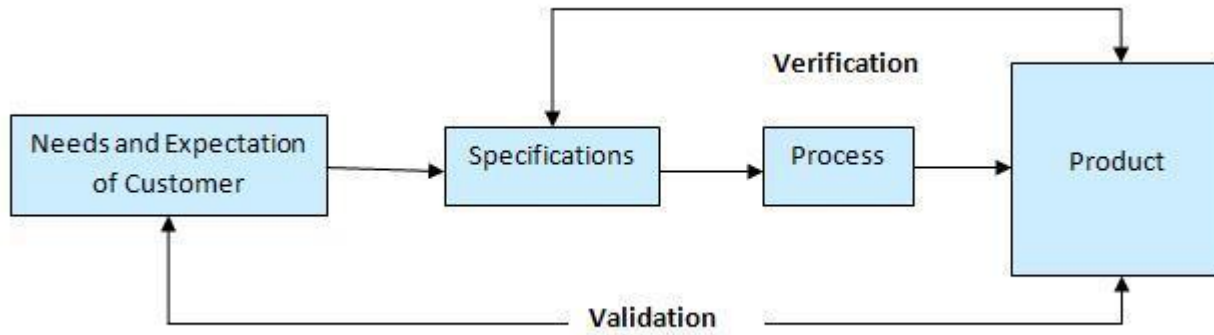
Integration Testing

- Test the system modules as a group
- From model creation to graph suggestion through
  - Properties categorization
  - Level of measurement
  - Visualization patterns selection
  - Allocations computation and validation
  - Ranking

Validation and Verification Testing

Verification: Are we building the product right?

Validation: Are we building the right product?

System Testing

- Final test before delivery.
- Aims to verify that the system to be delivered meets the specification and its purpose.
- Focus on
  - Usability testing
  - Performance testing

Thank You