Zen of VISIO 2008

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WebTechNY User Group

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About the speaker

Leona Rubin from New York began her career as a Senior Technical Communicator, Information Designer and Management Consultant in financial software research and development community in 1994.

Her client base include:

- Checkfree Investment Services
- Dun & Bradstreet
- Deutsche Bank
- Sirius Satellite

Leona is a member of the Society of Technical Communication (STC) and Women in Technology (WITI)

Goals

- Define all phases and key activities across all disciplines

- Build confidence in project execution teams

- Improve traceability for compliance

- Facilitate Rational Unified Process (RUP) adoption

Critical Success Factors

- Bridge the gap in stakeholder's community
  - Integrate build permit stages

- Ensure continuity in deliverables
  - White papers

- Adhere to corporate
  - Best practices and compliance

Architectural Essentials

- Just as an architect develops blueprints for building space a web developer needs
    - Wire frames
    - Process flows
    - Site maps

Web Environment

- Website development factors:
  - Navigation (usability and quality)
  - Hosting service
  - Performance

- Projects differ greatly from one another

Building a Framework

- Define the functional elements
- Organizing the site content
- Information (IA) deliverables
- Work break down structure
- Quality Assurance (testing iterations)

Recommended Structuring Tools

- Microsoft Visio
- Smart Draw
- Enterprise Architect
- Objects by design
- Rational Unified Process (IBM)
- Microsoft Framework

Modeling Methodologies

- Booch
- Rumbaugh
- Ivar Jacobson
- UML

Wire Frames

- Wire framing is one approach or tool you can use to properly design a Web application.

- Design before build development work begins (clients, project managers, and Web developers.

Tony Patton, IBM

Rational
Stakeholder Community

Stakeholder Community	Role
Technology	■ Software Developers ■ Operations
Project Managers	■ Project Managers
Program Managers	■ Program Managers
Analysts	■ Business Analysts ■ Systems Analysts ■ SME's
Quality Assurance Testers	■ Test Managers ■ Test Designers ■ Testers
Management	■ Project Sponsors

Rational Unified Process (RUP) Methodology

- Reinforces analysis through RUP workflow to retain an order of activities
  - Analysis and website design artifact set
    - Templates
    - Best Practices

RUP recommends UML notation

- Booch
- Rumbaugh
- Ivar Jacobson
- UML

*All methodologies are married
in the Rational Unified Process (IBM)*

UML

- 1.0
- 2.0
- 3.0
- SysML 1.0

UML has grown up.
Please visit
WC3 and OMG.org
for the latest updates

Basic UML Notation

- **Initial node**. The filled in circle is the starting point of the diagram. An initial node isn't required although it does make it significantly easier to read the diagram.
- **Activity final node**. The filled circle with a border is the ending point. An activity diagram can have zero or more activity final nodes.
- **Activity**.   The rounded rectangles represent activities that occur. An activity may be physical, such as *Inspect Forms*, or electronic, such as *Display Create Student Screen*.
- **Flow/edge**. The arrows on the diagram. Although there is a subtle difference between flows and edges I have never seen a practical purpose for the difference although I have no doubt one exists. I'll use the term flow.
- **Fork**. A black bar with one flow going into it and several leaving it. This denotes the beginning of parallel activity.
- **Join**. A black bar with several flows entering it and one leaving it. All flows going into the join must reach it before processing may continue. This denotes the end of parallel processing.
- **Condition**. Text such as *[Incorrect Form]* on a flow, defining a guard which must evaluate to true in order to traverse the node.
- **Decision**. A diamond with one flow entering and several leaving. The flows leaving include conditions although some modelers will not indicate the conditions if it is obvious.
- **Merge**. A diamond with several flows entering and one leaving. The implication is that one or more incoming flows must reach this point until processing continues, based on any guards on the outgoing flow.
- **Partition**. Figure 2 is organized into three partitions, also called swimlanes, indicating who/what is performing the activities (either the *Applicant*, *Registrar*, or *System*).
- **Sub-activity indicator**. The rake in the bottom corner of an activity, such as in the *Apply to University* activity, indicates that the activity is described by a more finely detailed activity diagram. In Figure 2 the *Enroll In Seminar* activity includes this symbol.
- **Flow final**. The circle with the X through it. This indicates that the process stops at this point.
- **Note**. Figure 2 includes a standard UML note to indicate that the merges does not require all three flows to arrive before processing can continue. An alternative way to model this would have been with an OR constraint between the *no match* and *applicant not on match* list flows. I prefer notes because stakeholders find them easier to understand.
- **Use case**. In Figure 1 I indicated that the *Enroll in Seminar* use case is invoked as one of the activities. This is a visual cheat that I use to indicate that an included use case is being invoked. To tell you the truth I'm not sure if this is official allowed by the UML, but clearly it should be. Another way to depict this is shown in Figure 2 via the use of a normal activity although I don't think this is as obvious as using a use case.

Agile modeling, UML 2.0 Activity Diagrams, Scott Ambler

Decade for Innovation

Web 1.0

DoubleClick
Ofoto

Akamai

mp3.com

Britannica Online

personal websites

Evite

domain name speculation

page views

screen scrapings

publishing

content mgmt. systems

directories (taxonomy)

stickiness

Web 2.0

Google AdSense

Flickr

BitTorrent

Napster

Wikipedia

blogging

upcoming.org and EVDB

search engine optimization

cost per clicks

Web services

Participation

Wikis

tagging ("folksonomy")

syndication

Hot Links

- Openmethodology.org
- Econsultant.com (for Web 2.0)
- WC3 (standards)
- Omg.org (object modeling standards)