Context Model

Gazebo Hub Project

27 May 2013

This is a proof-of-concept outline, demonstrating components of a context model and components of a project model for the Gazebo Hub Project.

In some branches, the legibility of relations within the context model approaches zero. It may therefore seem that only a simple context model can be represented interchangeably with a mindmap

- Human Enterprise
  - Society
    - Community
      - Community (Concepts)
Draft 2, 23 Feb 2013
(Non-Normative)
        - This section of the context model was recently added from within a personal outline of selected community concepts. It's currently peppered with my own commentary, in outline callouts. The community concepts model should soon be updated towards a more normative form, now that it would be included in the formal Context Model for the Gazebo Hub Project - Sean Champ, 27 May 2013
        - Works Referenced
          - See also: Bibliographies in those works
          - [Goodman1998] Goodman, R. M. et al. "Identifying and Defining the Dimensions of Community Capacity to Provide a Basis for Measurement." Health Education & Behavior 25.3 (1998): 258–278.
        - Concepts (Current Draft)
          - Community Capacity
            - Dimensions [Goodman1998]
              - Participation & Leadership
                - Citizen Participation
                  - Strengths in the participant base
                  - Diversity in networks
                    - I'll add: Stability in networks
                  - Citizen involvement in defining, understanding, and completing goals
                    - I'll add: Community goals setting should be community driven, in a democratic society
                - Leadership
                  - Formal and informal leaders should be included
                  - Leadership provides some sense of direction and structure
                    - I'll add: Leadership brings its own experiences to the table. Furthermore, it should be emphasized as a matter of, by, and for the people, not per se for the agendas of community leadership if apart from the goals of the community
                  - Leadership must encourage participation from and within the diverse community base
                    - Procedures may be implemented (insofar as developed) to endeavor to ensure (and support) an inclusive mode of participation during group meetings and events
                      - I'll add: But try not to make it like a dog and pony show, of structure devoid of substantive meaning and understanding
                  - Leadership must assist in sharing information about resources among community and organizational participants
                  - Must assist in developing new leaders
                  - Must be responsive and accessible in demeanor
                  - Not disconnected from other leaders
              - Skills
                - The authors seem to propose a rather formal approach to community activity, in terms of skills - no doubt, an approach influenced with paradigms of social policy work.

Experience may hold that a less formal, less bureaucratic approach may ultimately serve to be more adaptive and more sincerely effective, in addressing community needs, goals, and community life overall, with available, material resources.

Perhaps an informal approach, as such, may serve to augment the necessarily formalized approaches of social policy workers
              - Resources
                - May be internal or external to a community, as resources
                - Resource sharing, in the community
                - Social capital
                  - Trust
                  - Confidence
                  - Cooperation
              - Social and Interorganizational Networks
                - Reciprocal links
                - Frequency of supportive interactions
                - Overlap, among community networks
                  - May exist as social, pragmatic, and/or conceptual overlap, for instance
                - Members able to form new associations
                  - A democratic structure for community, not oligarchical
                - Cooperative decision-making
              - Sense of Community
                - Concern for community issues
                  - Must be predicated with an understanding of community issues
                - Respect
                - Generosity
                - Selflessness
                - Connectedness with place and people
                - Needs fulfillment through membership (???)
                  - This one is listed in [Goodman1998] table 1

It needs more exposition than in table 1 - refer to later sections of the paper
              - Understanding of Community History
                - Recent and historic social, political, and economic changes
                - Knowledge of organizations, community groups, and community sections
                  - The community may endeavor to ensure that community leadership would not displace selected groups, if by way of negligence and alternate focus
                - Community relations to other communities
              - Community Power
                - Positions in regards to dynamics of change - to create, support or resist change - in regards to community resources, community interests (and goals), and community experiences
                - Mutual power, not controlling power
                  - Avoid "zero sum" strategies
                - Diversity of influences
              - Community Values
                - Consensus building
                - "Norms, standards, and attributes"
                  - This concept may support a risk, however, of introducing private agendas in endeavoring to override community interests
              - Critical Reflection
                - Reflection on assumptions about ideas and actions
                - Logical reasoning and scrutiny in regards to ambiguity in community discussions
                  - This may entail a sense of patience and of clarity, in regards to difficulties in communication and mutual understanding of ideas
                - Understanding pressures of environmental influence on individual and social behavior
                  - This may call for a sense of caring objectivity, about environmental influences - even in regards to negative trends in a community, trends such as of youth gangs, violence, aggression, drug use, sexual abuse, homelessness, poverty, and overall difficulty in overcoming the negative influences of the diaspora, in personal and family life. while (for instance) proceeding through school, individually and within the community, and in living in professional and family life, overall.
                - Self-analysis and evolution in the community
        - Works remaining to reference
          - [Young1995] Young, Iris M. "The Ideal of Community and the Politics of Difference." Feminism & Community. Ed. Penny A Weiss & Marilyn Friedman. Philadelphia: Temple University Press, 1995. 233–258.
    - Social Entrepreneurialism
    - Business
      - Work Area: Economic Analysis
        - Statistical Data Sets
          - BLS Consumer Spending Index
          - BLS Labor Data Sets
        - Presentation Models
          - uDig Projects
          - Online Presentation Models
        - Relevance
          - Consumer Market Analysis (Business View)
          - Jobs Market Analysis (Student View)
        - To do: Gazebo Hub Project Modeling (PM) Ontology

Model the concept of a "work area" with an additional OWL class, in a project modeling ontology, such that would import the Gazebo Hub CM ontology

Extend that "work area" class and its data model instance, "Economic analysis," with properties associating a work area with developer resources such as: Repository and module path; Wiki; Tickets. Also define a class, "Project," in that ontology, and consider integrating the ontology with emForge.

Note that a "Work area" may be informally like a module, whether or not discretely integrating with a containing system. A work area provides, simply, a context for further development of resources within a project.

The class, "Milestone," would extend, "Work Area"

The PM ontology may also define a class, "Roadmap"
          - This, in turn, may serve to suggest the development of some new project management tooling, incorporating data models based on the PM ontology
            - The Gazebo Hub Core Ontologies set should include an ontology for serialization of a permissions model, for use in ontology tooling. To serve a functional purpose, that ontology should also be incorporated with a user authentication model for integration with same tooling,
              - it may be wise to consider basing the auth/permissions model and corresponding system on a CAS system
  - Technology
    - This context area poses a challenge for the single-axial model.

Consider that a SysML profile is both a SysML profile and a UML profile, simultaneously.

It would seem that MOF and UML together form essentially the "backbone" for the modeling components of OMG MDA. As far as the question of whether a diagram tool implementer should select a modeling system's metamodel or respective UML profile for implementation and support, it would probably be a question of how the modeling tool would be used - whether in a broader sense, with the modeling system's metamodel, or with existing UML tools, as with the respective UML profile.

As far as the question of whether a model system developer would develop a UML profile and/or an MOF metamodel for the diagram system, it may likewise be a question of context of use. A UML profile may support a more simple mode of integration with existing UML modeling tools, whereas an MOF metamodel may require more extensive work for integration with existing modeling tools.
    - Software Programming
      - Software Languages
        - This model may derive features from SAML
          - JA-SIG CAS supports using SAML 1.1 for ticket validation requests
            - See also: CAS user manual
        - See also: Notes for installing CAS in jBoss
        - See also: CAS user manual
        - Successful CAS installation would serve to enable the server as an SSO provider.

Other more low-level authentication models are available (e.g PAM-LDAP)
        - Systems Programming Languages
          - Lisp Programming Languages
          - Common Lisp Programming Language
        - Data Serialization Languages
          - XMI
          - XML
            - The variety of XML syntaxes presents the opportunity to illustrate the usage of a single mode of informative "derives from" relation, within the context model - as specifically denoting when an application data serialization syntax (such as XMI) derives from a more general data serialization syntax (such as XML) though each respective syntax would be organized within a separate branch of the context model.

Note, furthermore, that in the case of the derivation of XML from SGML, XML also adds features not deriving directly from SGML syntax, such as with XML namespaces.
          - SGML
        - Modeling Languages
          - MDA Diagram Systems (Non-normative term)
            - UML Diagram System
            - SysML Diagram System
            - SoaML Diagram System
          - MDA Modeling Languages
            - MOF
              - EMOF
              - CMOF
              - MOF Metamodels
                - UML Metamodel
                - SysML Metamodel
                - (SysML Metamode)
            - ???
              - ECore
                - EMF
                  - Compatibility with EMF may serve to ensure, transitively, compatibility with Eclipse modeling components such as Grafiti
                - See also: "Relationship between EMF and MOF/UML", Eclipse Community Forums (11 April, 2003) (at link)
                - This area needs further research, as for the detailed relations of metamodels and (e.g) UML profiles.

In one exact question: Is it possible to model a BPMN diagram with a UML profile? (A: Yes. The OMG publishes an albeit non-normative UML profile for BPMN, as well as for each of SysML and SOAML)
            - OCL
          - UML Profiles
            - UML (UML Profile)
            - SysML Profile
            - SoaML Profile
          - OWL
            - OWL is represented here as comprising an ontology modeling language
            - OWL Syntaxes
              - OWL XML Syntax
              - OWL Functional Syntax
              - OWL Manchester Syntax
              - OWL RDF Syntaxes
                - OWL RDF XML Syntax
                - OWL in N3
                - OWL in Turtle
          - RDF
            - RDF Syntaxes
              - RDF XML Syntax
              - N3
              - Turtle
      - Software Tools
        - Modeling Tools
          - Modeling Tools (Desktop Platform)
            - Modelio
            - Cubetto
          - Modeling Tools (Mobile Platform)
            - Cubetto
          - Modeling Tools (Web Based)
            - Web Based BPMN Modeling Tools
              - BOS
              - Aperte Workflow
              - Activiti
    - Project Management Methodologies
      - This context area should be assigned a work area within the GHub Project, such that would contain the development of the GHub Project's Project Model (PM) Ontology

(To Do)
      - Agile Methods
        - eXtreme Programming (XP)
          - See also
            - Select Business Solutions. "What is Extreme Programming? (XP)". Acc. 26 May 2013
        - Scrum Methodology
          - See Also
            - Rawsthorne, Doug and Shimp, Dan. Exploring Scrum. 2011 (Book)
            - Scrum Alliance (Organization)
        - The "Making Ideas Happen" Methodology
          - Not per se a formal project management methodology, more a task-oriented approach, geared towards creative work
          - Developed by Scott Belsky
          - See also
            - Belsky, Scott. Making Ideas Happen. 2010 (Book)
        - Other Agile Methods
          - See also
            - Leonard, Martin. Big Agile Toolkit. 2011 (Book)
      - Institutional Project Management Methodologies
        - Capability Maturity Model (CMM)
          - Developed originally by the Software Engineering Institute (SEI)
          - See also
            - Wikipedia. Capability Maturity Model. 19 May 2013. Acc 26 May 2013 (Web Page)
          - Successor
            - CMMI
              - See also
                - CMMI Institute (Organization)
                - Select Business Solutions. "What is Capability Maturity Model Integration? (CMMI)". Acc. 26 May, 2013 (Web Page)

/Context Model/Human Enterprise/Technology/Software Programming/Software Languages/Modeling Languages/MDA Diagram Systems

An MDA diagram system, in the sense denoted within this context model, provides a visual model, an MOF metamodel, and a UML profile, for integration within systems diagram methodologies.