

Design and implementation of a task-centric social content management application for end-users

Michael Ostner

20.07.2015

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1. Introduction

1. Overview of Tricia & Darwin
2. Goal & Motivation

2. Use Cases

3. Approach

1. Components of the new System
2. Conceptual models of Tricia and Darwin
3. Simplified target implementation

4. Roadmap

5. Discussion

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Edit Wiki

Abstract

Hybrid Wikis try to combine the high applicability of ordinary wikis with the approach of semantic rich but static enterprise architecture modellings. The main concepts of these hybrid wikis are on the one hand keeping the loose structure of ordinary wikis, which means pages with pure text editable by users with specified rights and on the other side the combination of various meta data. There are for example attributes, type tags, attribute suggestions, as well as attribute definitions with integrity constraints.

Generating knowledge is often a process with loose structure. Therefore, an extra category called knowledge-intensive processes was introduced to support knowledge work. These processes normally cannot be expressed by typical business process management systems because of their unpredictability and error-proneness. Recent researches worked out requirements and characteristics which are needed to provide a system supporting knowledge-intensive processes including the ability for modeling and abstracting.

The goal of this master's thesis is to combine a Hybrid Wiki with aspects of a system supporting knowledge-intensive aspects. The focus is not to create an application for modeling purposes but to create an application, which helps to structure and document processes for knowledge work based on the idea of tasks combined with the characteristics of the Hybrid Wiki.

Keywords: SocioCortex, Tasks

Project:

Tricia

HybridWiki model as base concept

Darwin

Frontend

Generic Socio Cortex Client

AngularJS

Material Design

Attributes of this Student Project

Edit All

| | |
|---------------------------------------|--|
| Title (de) | Entwurf und Implementierung einer aufgabenorientierten Social Content Management Anwendung für Endbenutzer |
| Title (en) | Design and implementation of a task-centric social content management application for end-users |
| Project | Darwin - Empowering Users to Collaboratively Structure Knowledge-Intensive Processes |
| Type | Master's Thesis |
| Status | started |
| Student | Michael Ostner |
| Advisor | Felix Michel |
| Supervisor | Prof. Dr. Florian Matthes |
| Start Date | 15.06.2015 |
| Sebis Contributor Agreement signed on | 12.05.2015 |
| Checklist filled | Yes |
| Submission date | 15.11.2015 |
| Kick-off presentation slides | |
| Final presentation slides | |
| Thesis PDF | |

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Metadata for current task:

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End date: 15.01.2016

Progress: 13%

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Abstract

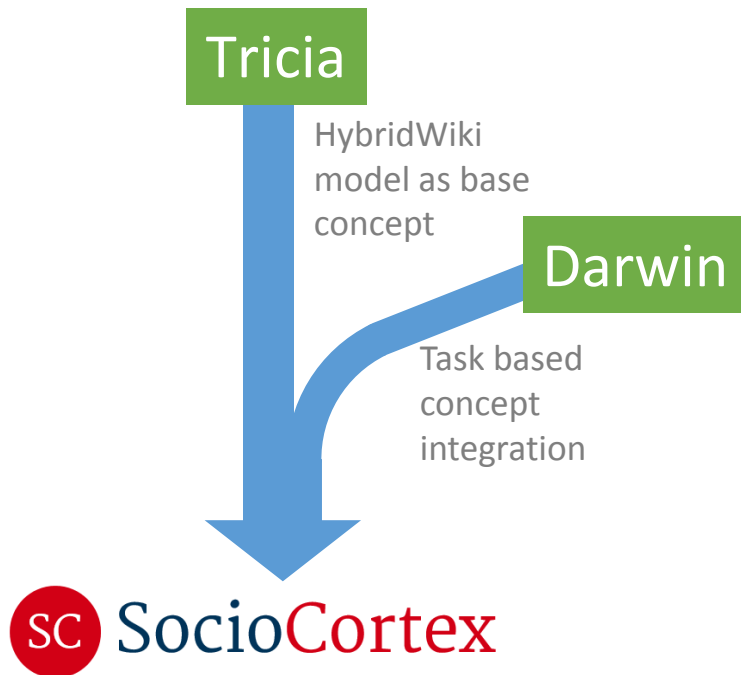
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Source: adapted from Hauder, 2015

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Tricia (Hybrid Wiki)

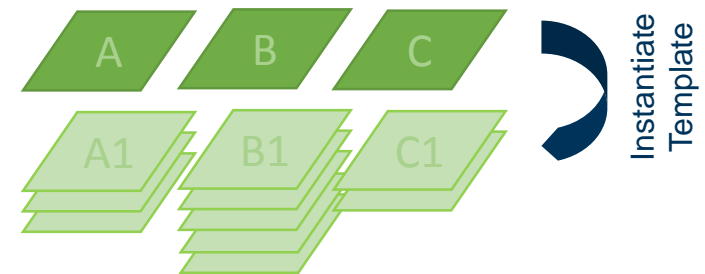
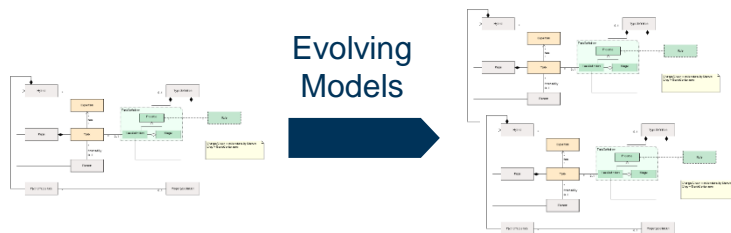
- Dynamic model schema
- Allows adding structured content in form of attributes
- Building types with bottom up approach

Darwin

- Modelling work plans for knowledge-intensive processes
- Monitoring the execution of processes
- Targeting end-users as well as modelling experts

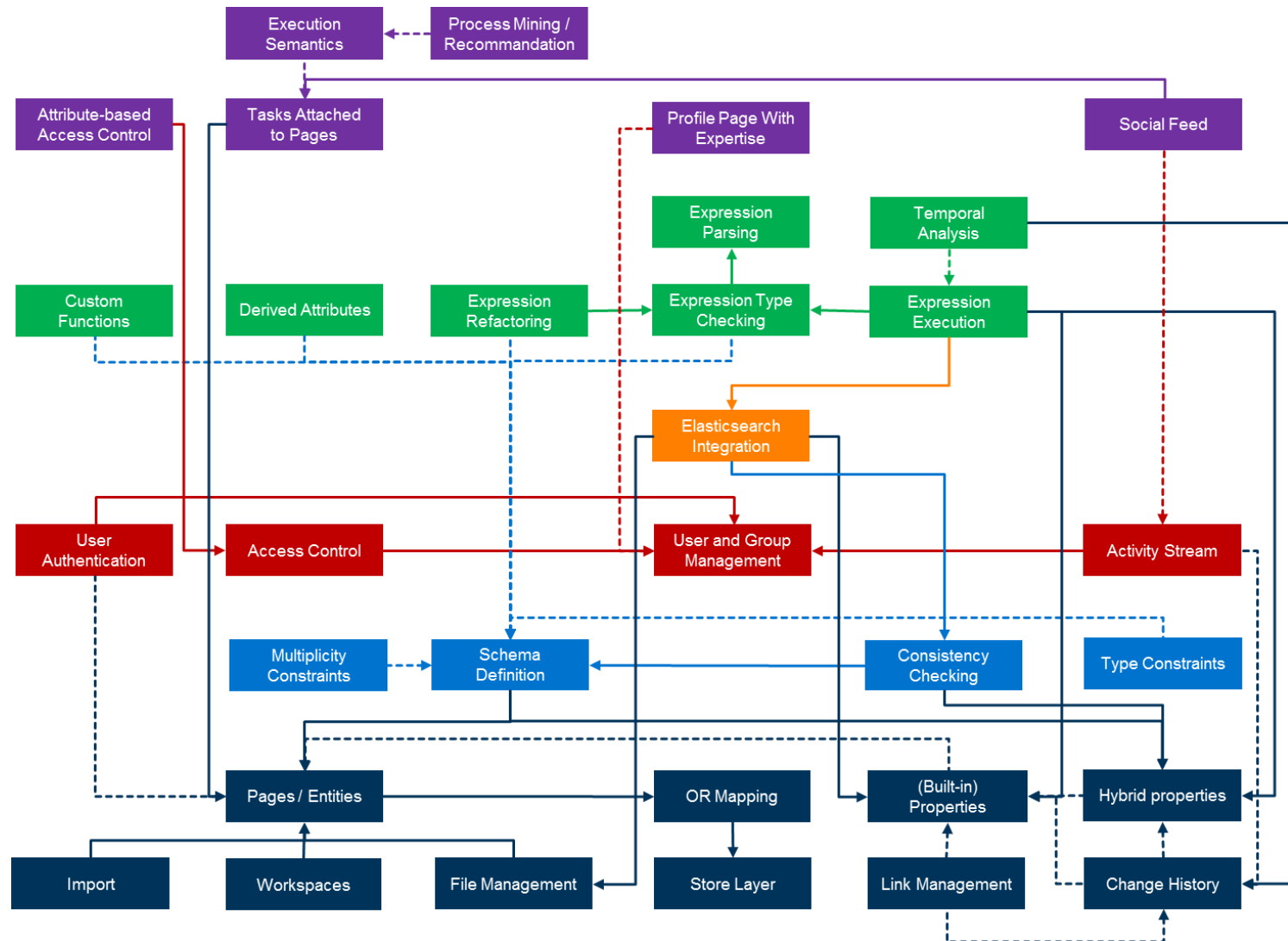
Tricia provides a generic meta model concept to support an evolving model approach.

Darwin that follows the adaptive case management paradigm enables users to instantiate task templates and dynamically execute them.



How to merge the generic emerging model concept of Tricia with the task-centered paradigms of Darwin?

SocioCortex – Feature Map



Source: Thomas Reschenhofer

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1

Task Navigation:

Use the navigation bar to drill down to the needed contribution. Find needed contribution based on a task drill down.

Source: adapted from Florian Katenbrink

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2

Task Planning:


Defining initial task metadata values for instantiated templates and adjust them based on the visual feedback of the Gant chart

Source: adapted from Florian Katenbrink





3

Task Execution:

Create artefacts and document deliverable artifacts. E.g. edit the wiki and adjust the attribute values of the task or add artifact as attribute values



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Complete

Delegate

Skip

Add new attribute

4

Task Finishing:

Complete the artifact creation and finish thereby or skip the task if the artifact is not needed

Source: adapted from Florian Katenbrink

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Complete

Delegate

Skip

Add new attribute

Thesis PDF

Add value...

Add new task

5

Process Adaption:
Adopt the current process to special needs. E.g. add an additional task or remove a defined task on the current process, vise versa for task attributes.

Source: adapted from Florian Katenbrink

The screenshot displays the sebiis web application interface. The top navigation bar includes the sebiis logo, faculty name, and search bar. The main content area shows a user profile for Michael Ostner with a progress bar and a list of tasks. A green box highlights the 'Task Notifications' section, which lists overdue tasks with their due dates. A yellow box highlights the 'Student Project' section, which provides details about the current project, including progress, dates, and owner.

Task Notifications:
Remind users to complete their overdue tasks.

Student Project

| Attributes | Tasks |
|----------------------------|------------------|
| Sign contributor agreement | Due: 8 days ago |
| Initial Presentation | Due: 1 day ago |
| Hand in final Thesis | Due: 15 days ago |

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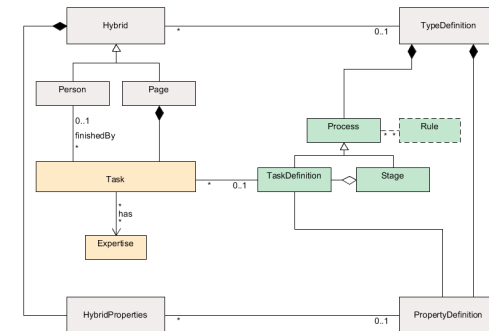
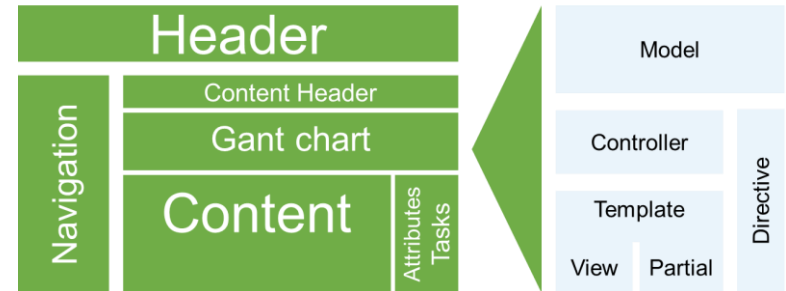
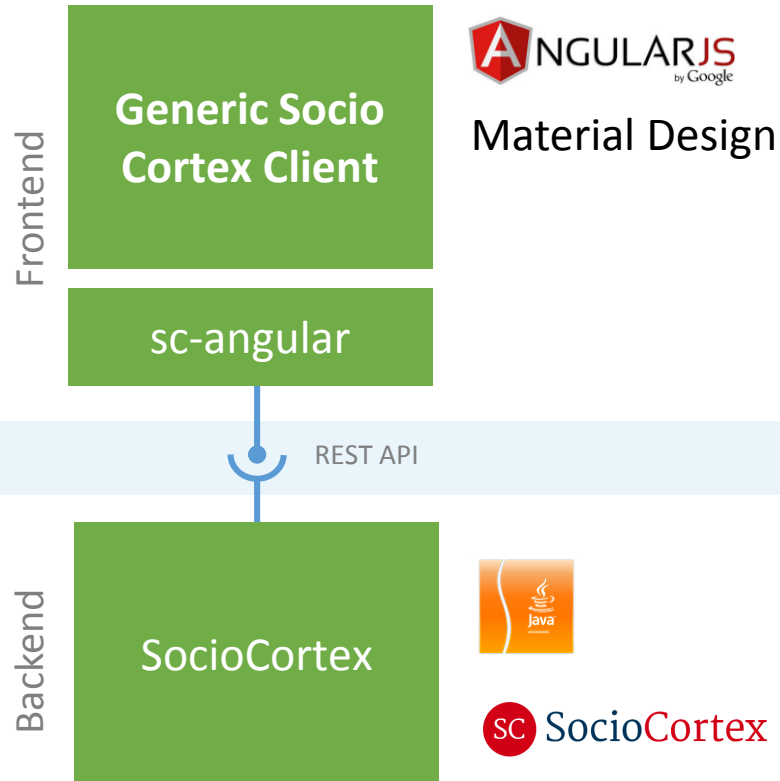
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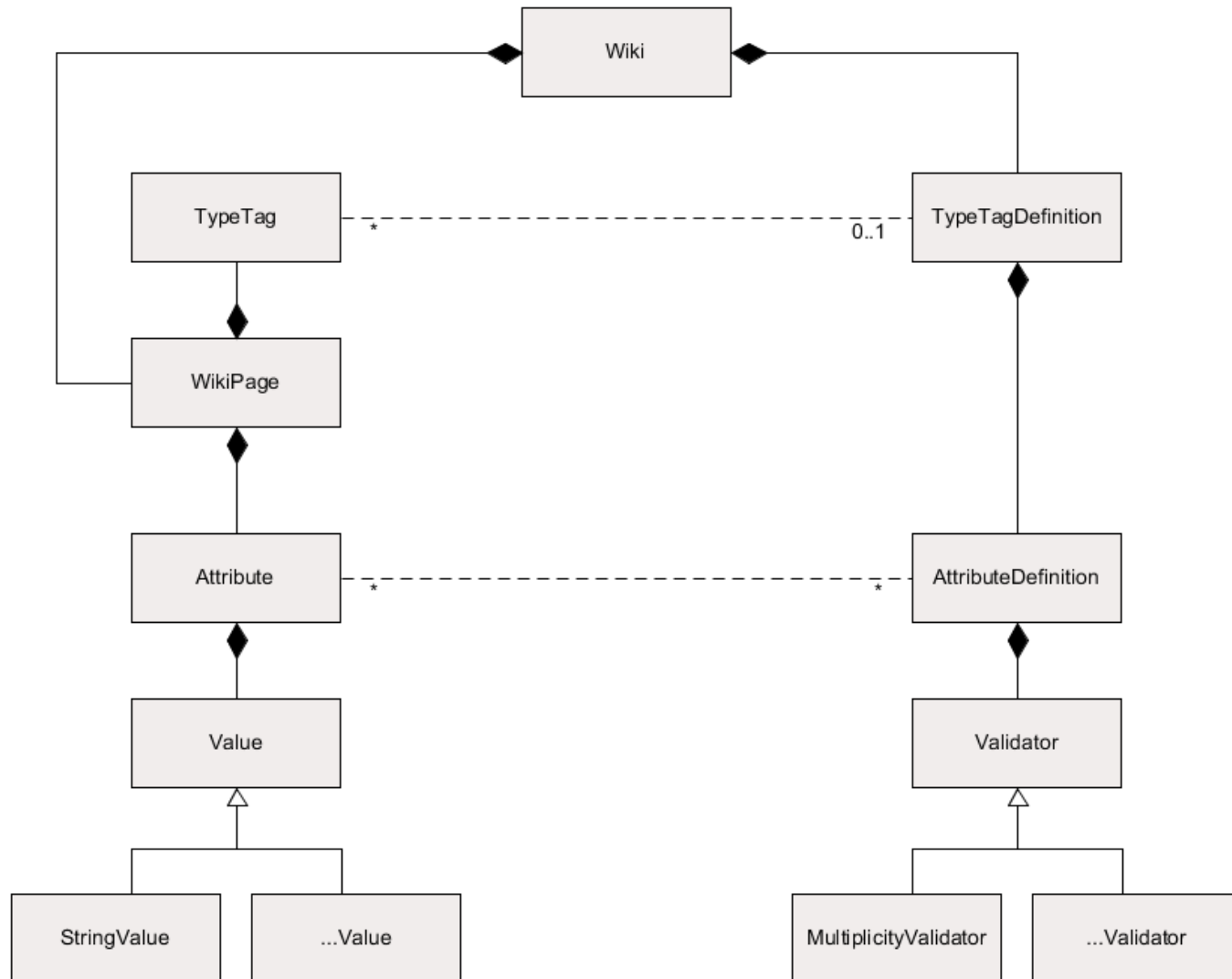
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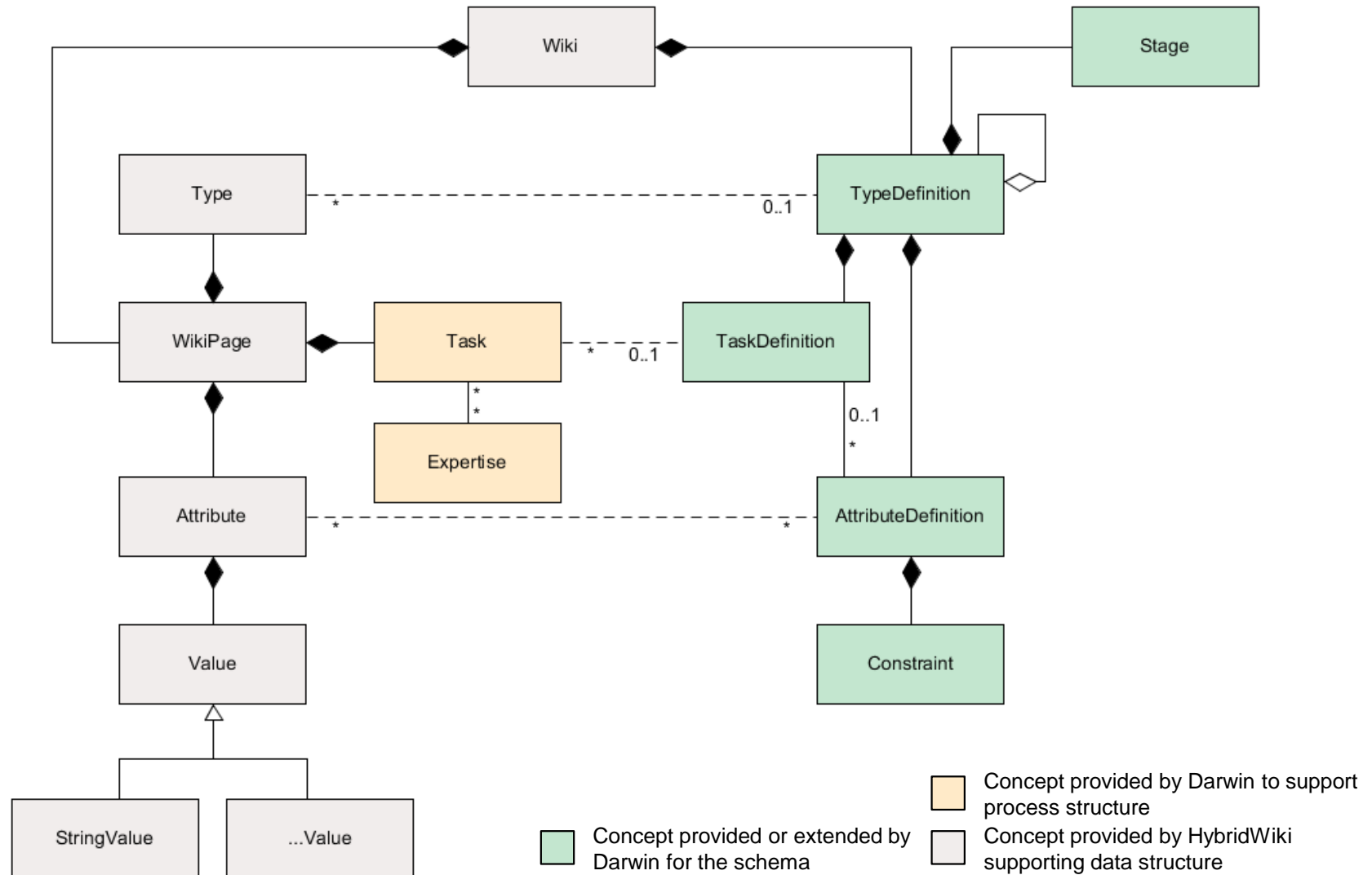
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Components of the application



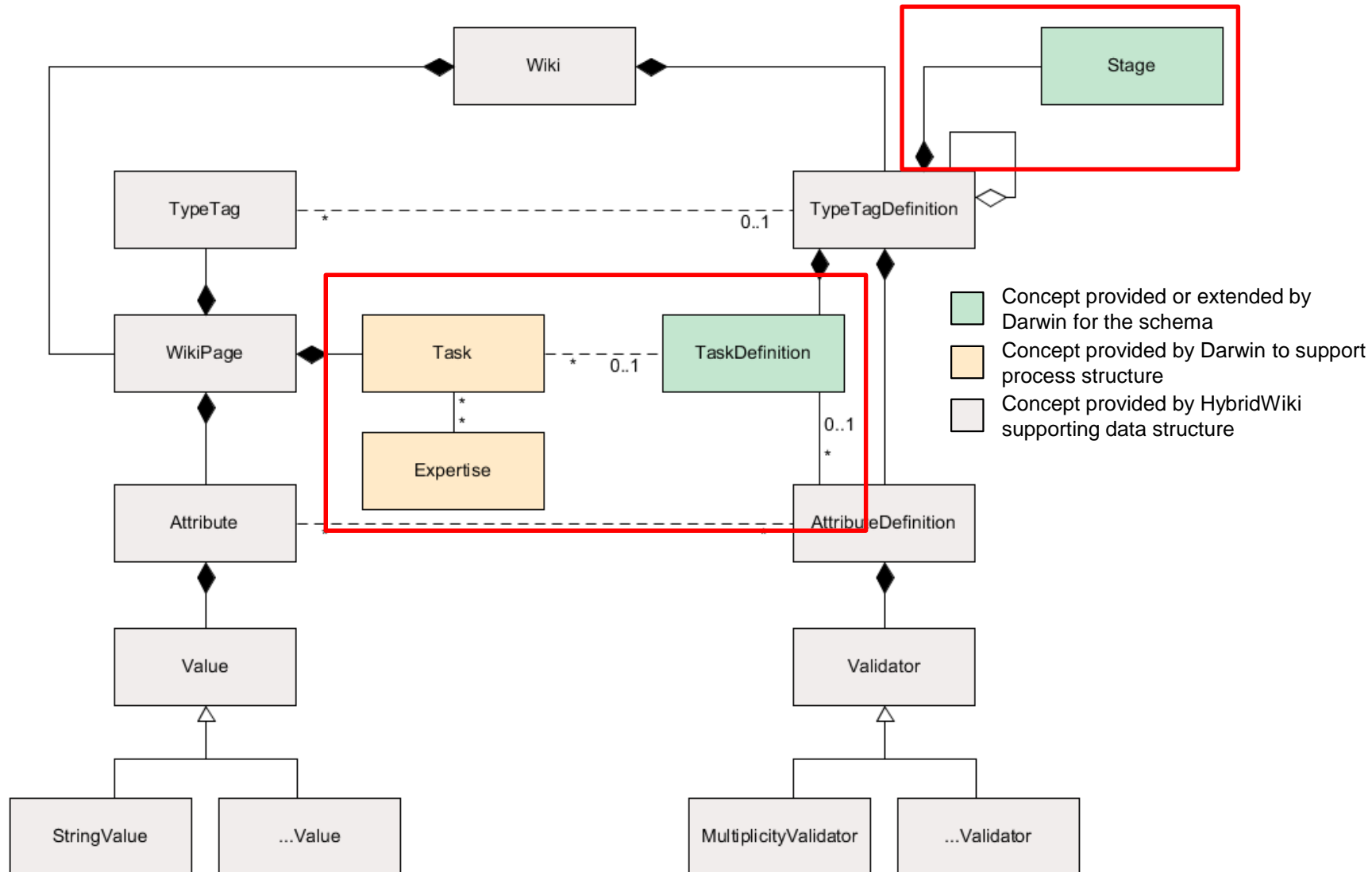


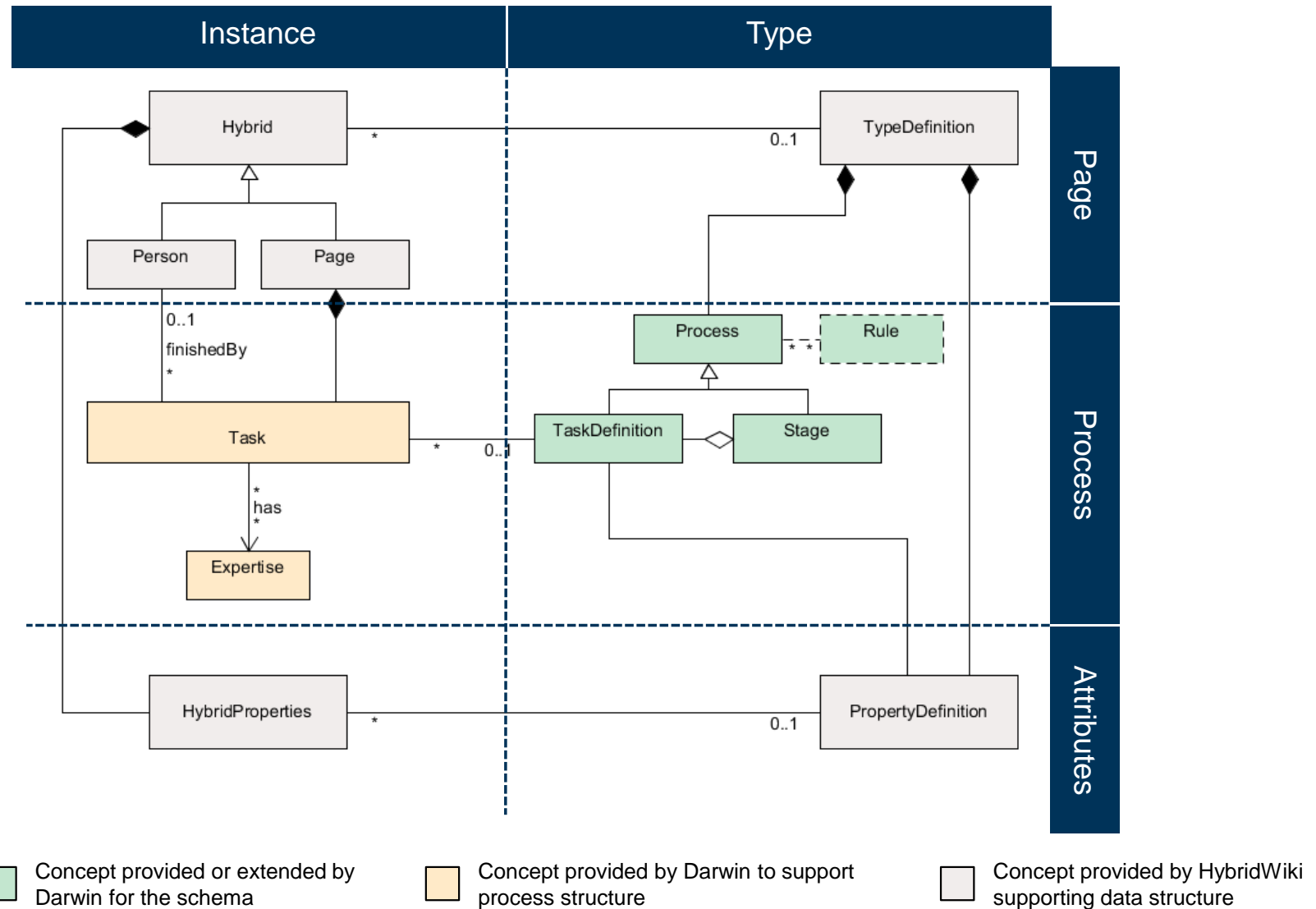
Source: adapted from Matthes, 2011



Source: adapted from Hauder, 2015

Hybrid Wiki concept extended with task-centric aspects **sebis**





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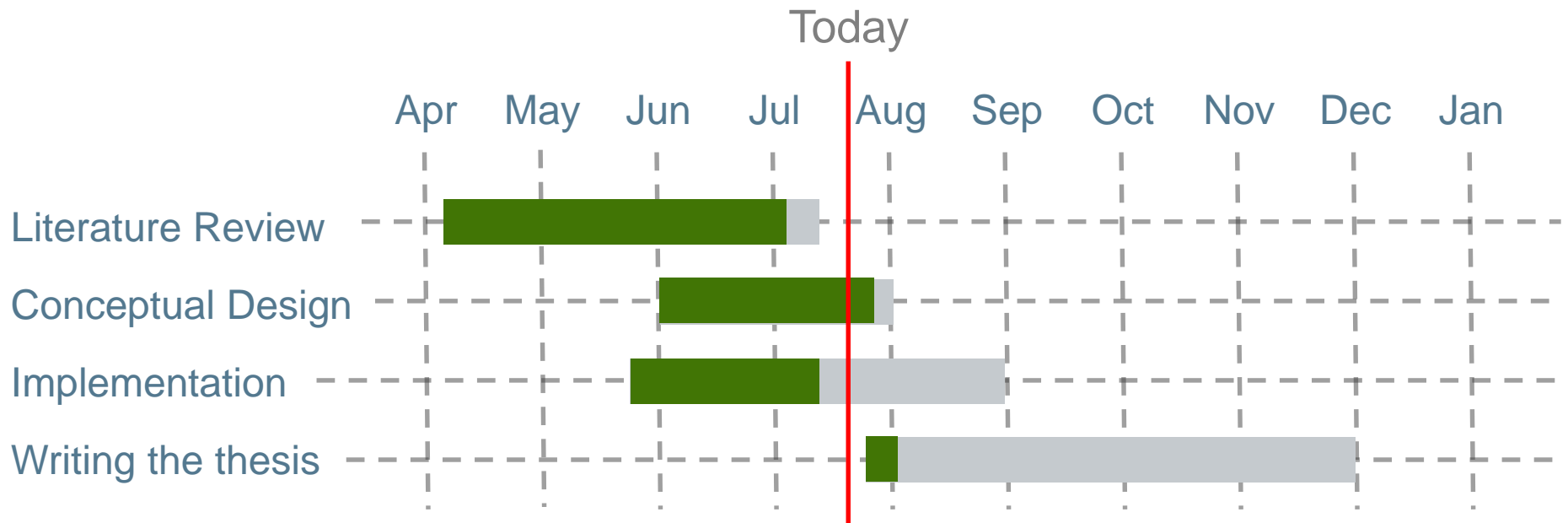
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