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

Michael Ostner

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Software Engineering for Business Information Systems (sebis)
Department of Informatics
Technische Universität München, Germany

wwwmatthes.in.tum.de

Agenda

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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Tricia - Screenshot

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Edit Wiki

Design and implemenation of a task centric social content management application for endusers

Abstract

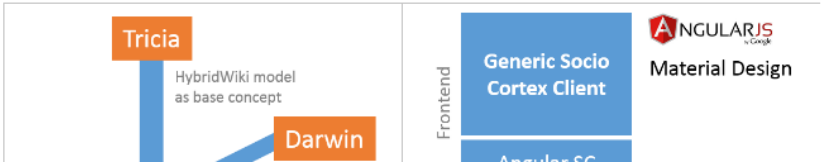
Hybrid Wikis try to combine the high applicability of ordinary wikis with the approach of semantic rich but static enterprise architecture modellings. The main concepts of these hybrid wikis are on the one hand keeping the loose structure of ordinary wikis, which means pages with pure text editable by 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:



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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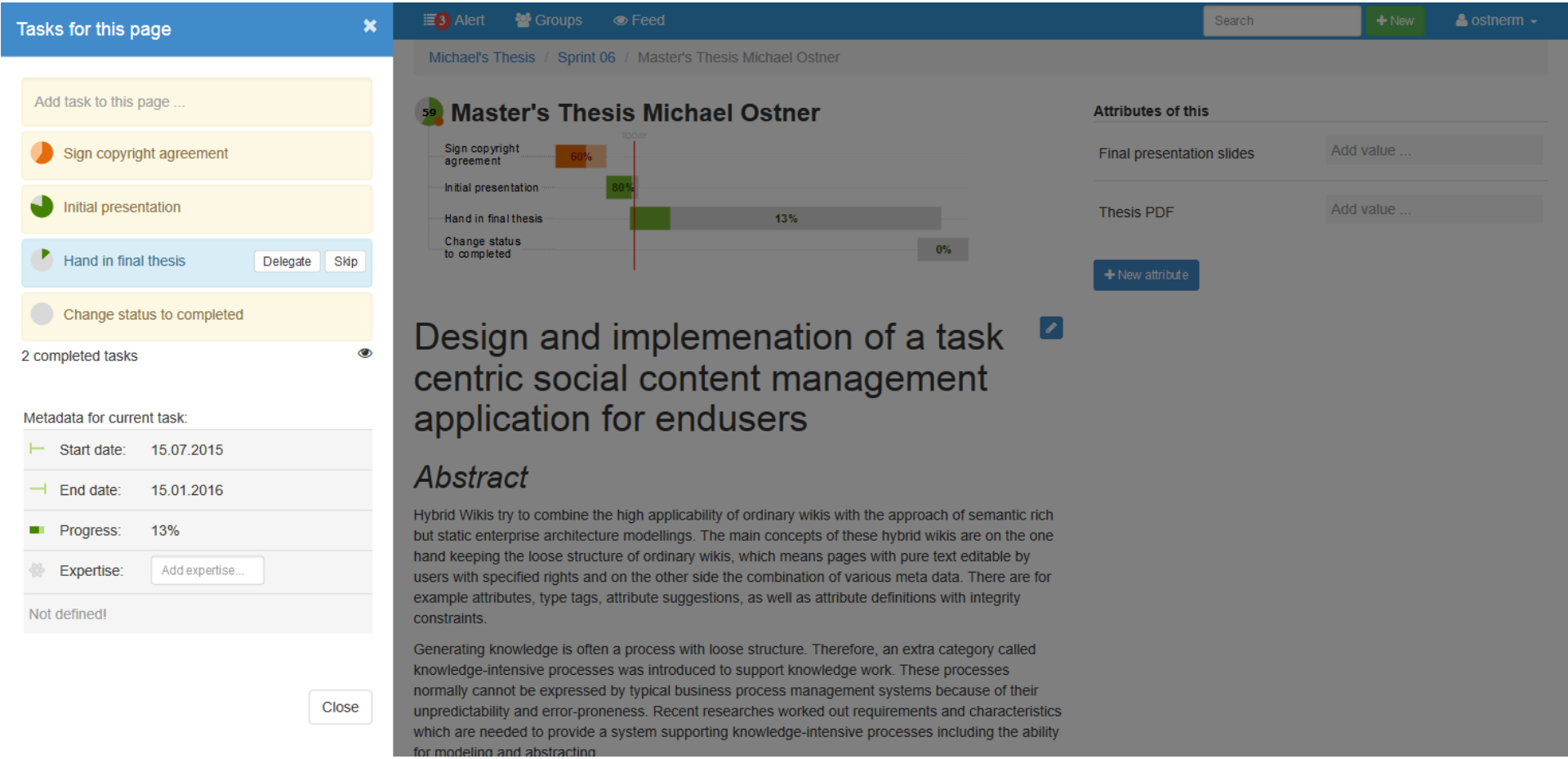
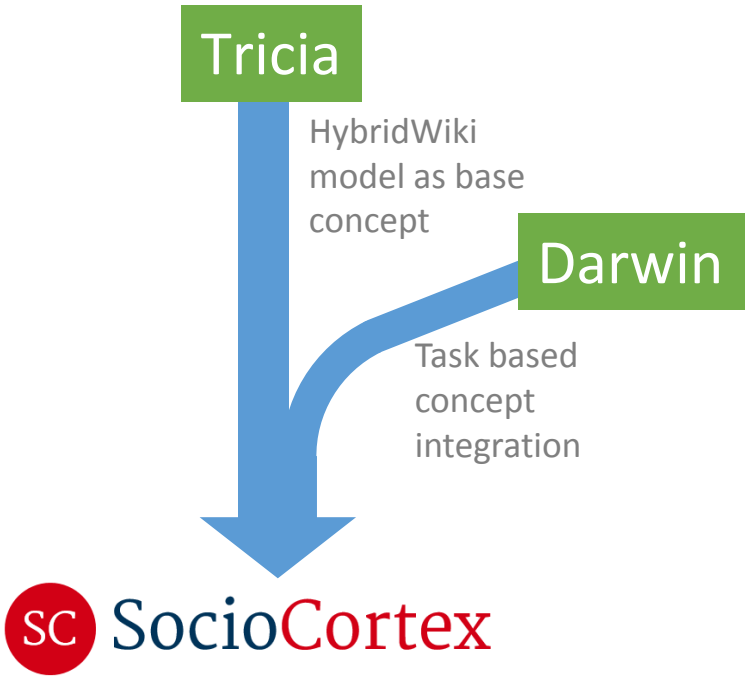
Source: https://wwwmatthes.in.tum.de/pages/1tfdwzvm65if3/Master-s-Thesis-Michael-Ostner, July 19th, 2015

Darwin - Screenshot



Source: adapted from Hauder, 2015



Tricia (Hybrid Wiki)

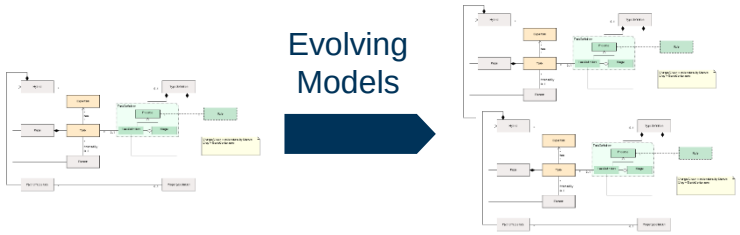
- Dynamic model schema
- Allows adding structured content in form of attributes
- Building types with bottom up approach

Darwin

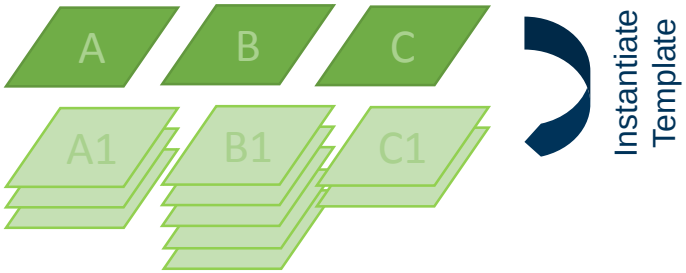
- Modelling work plans for knowledge-intensive processes
- Monitoring the execution of processes
- Targeting end-users as well as modelling experts

Motivation

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

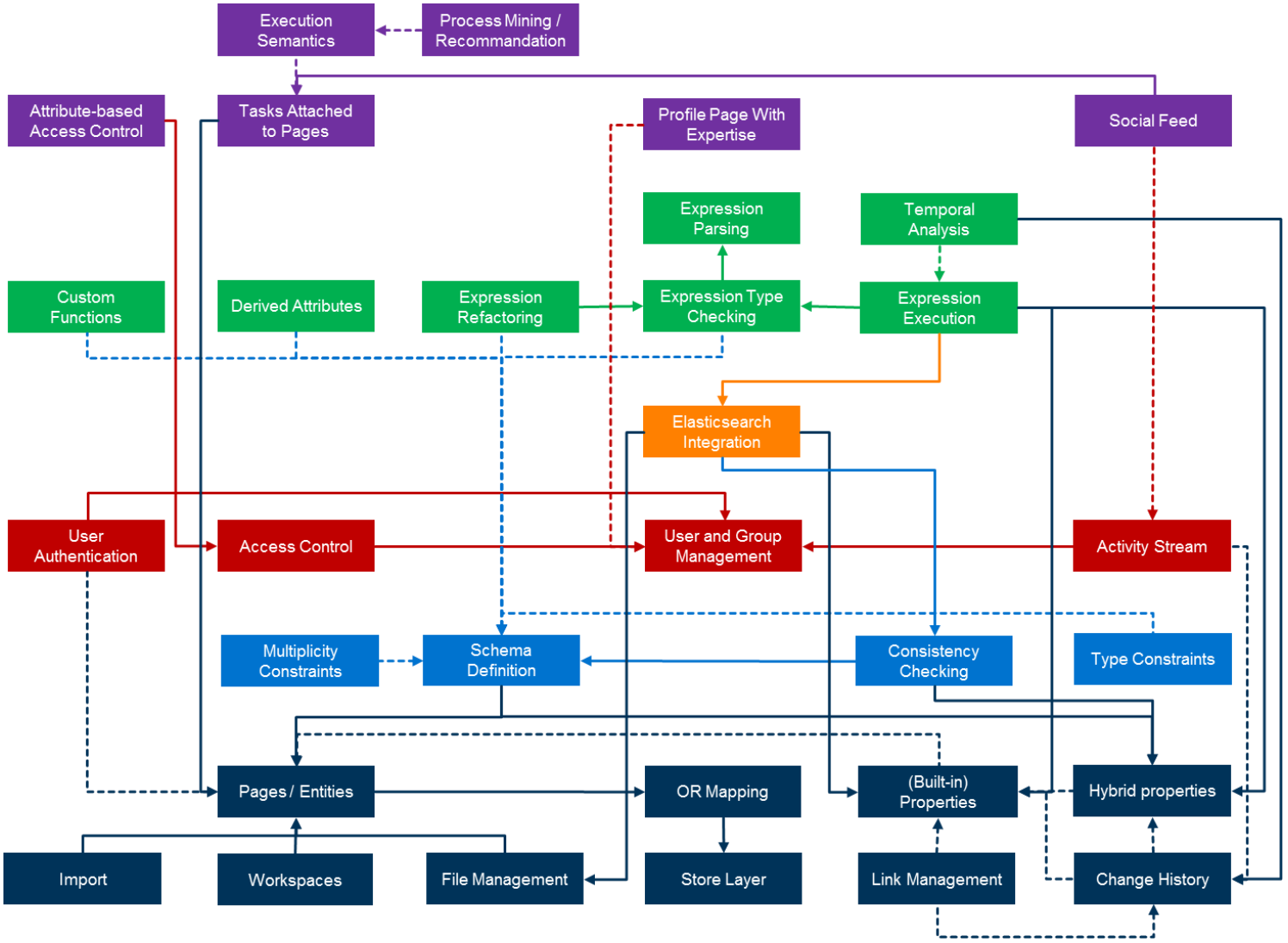


Darwin that follows the adaptive case management paradigm enables users to instantiate task temples and dynamically execute them.



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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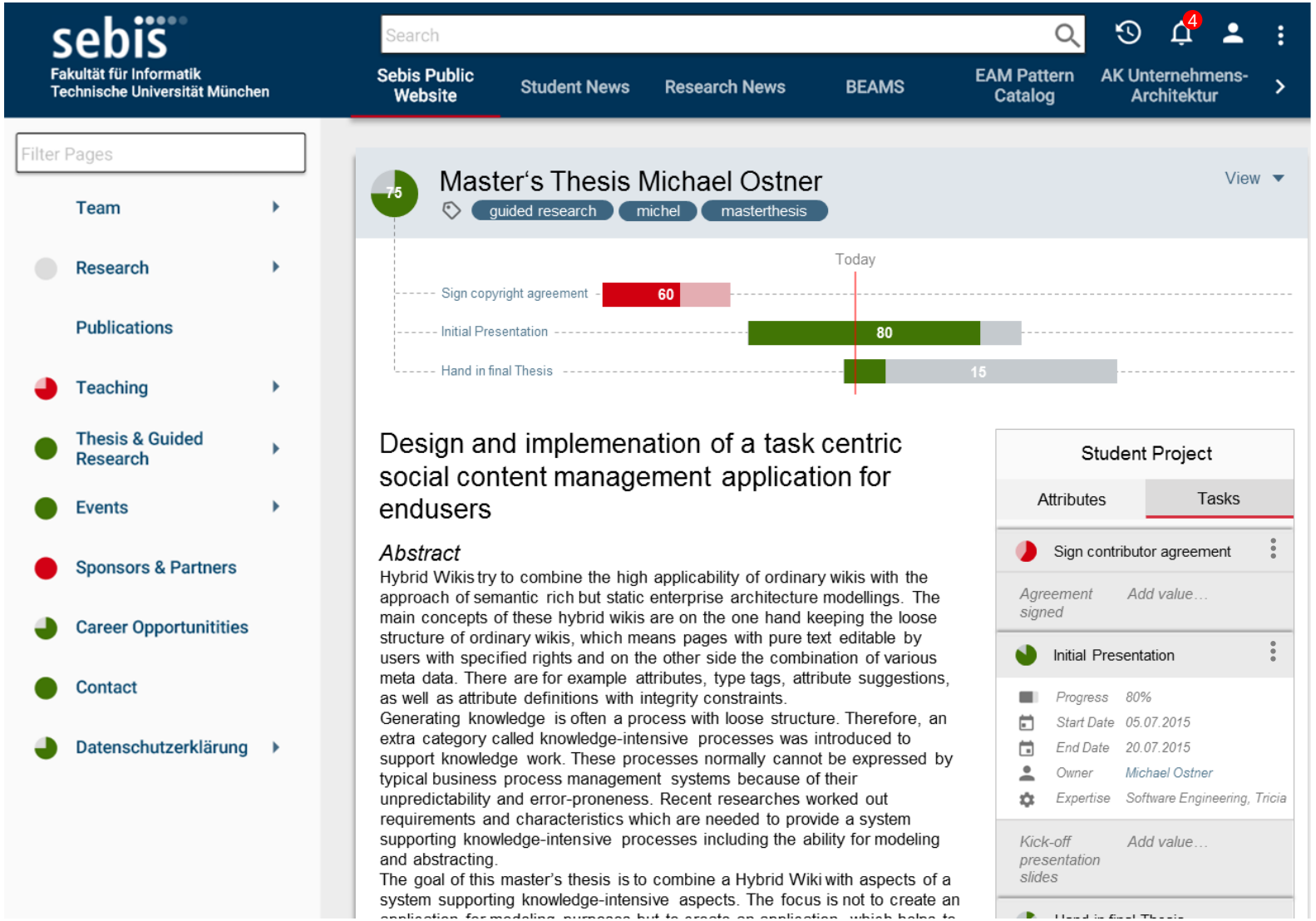
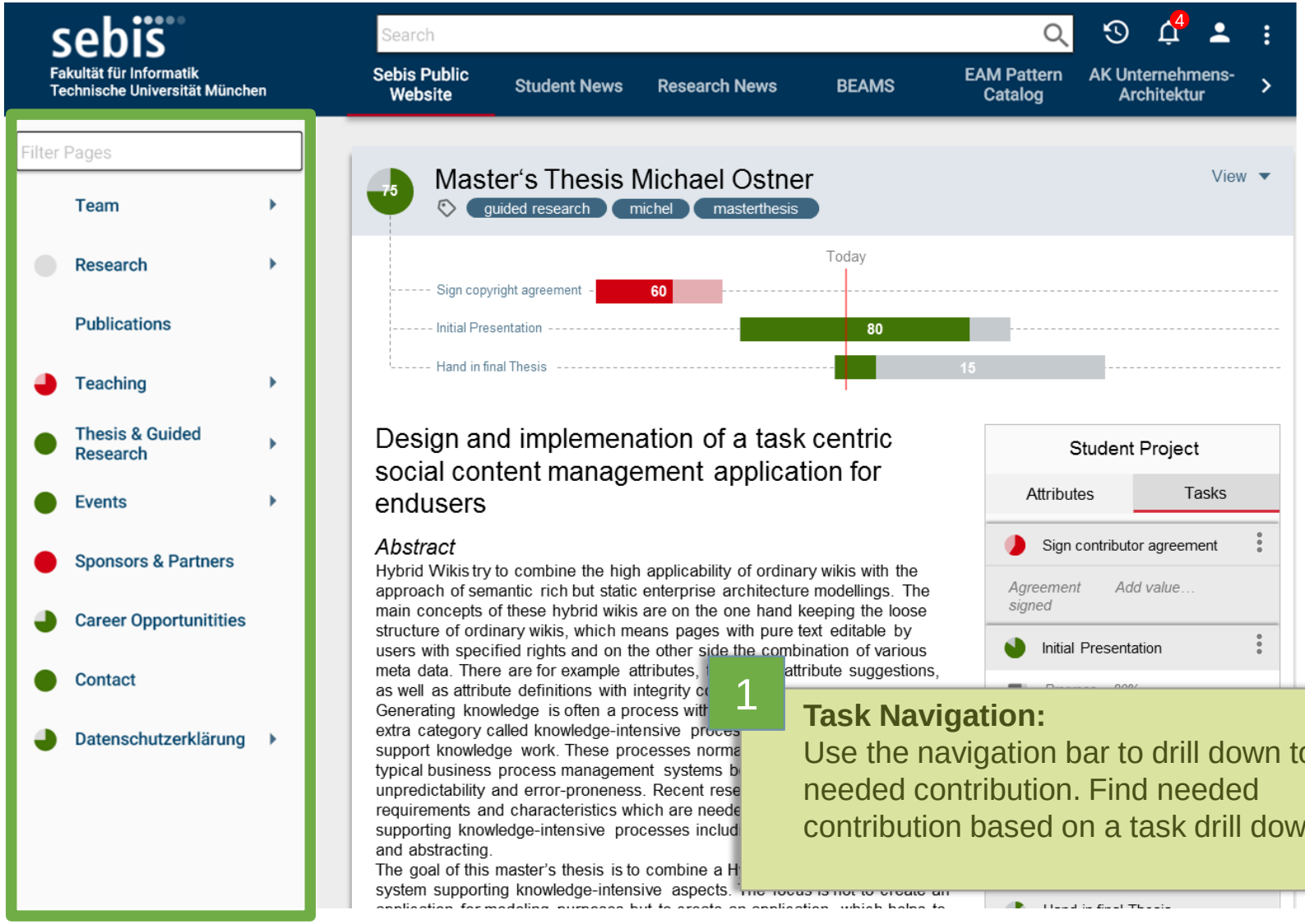
SocioCortex - Mockup



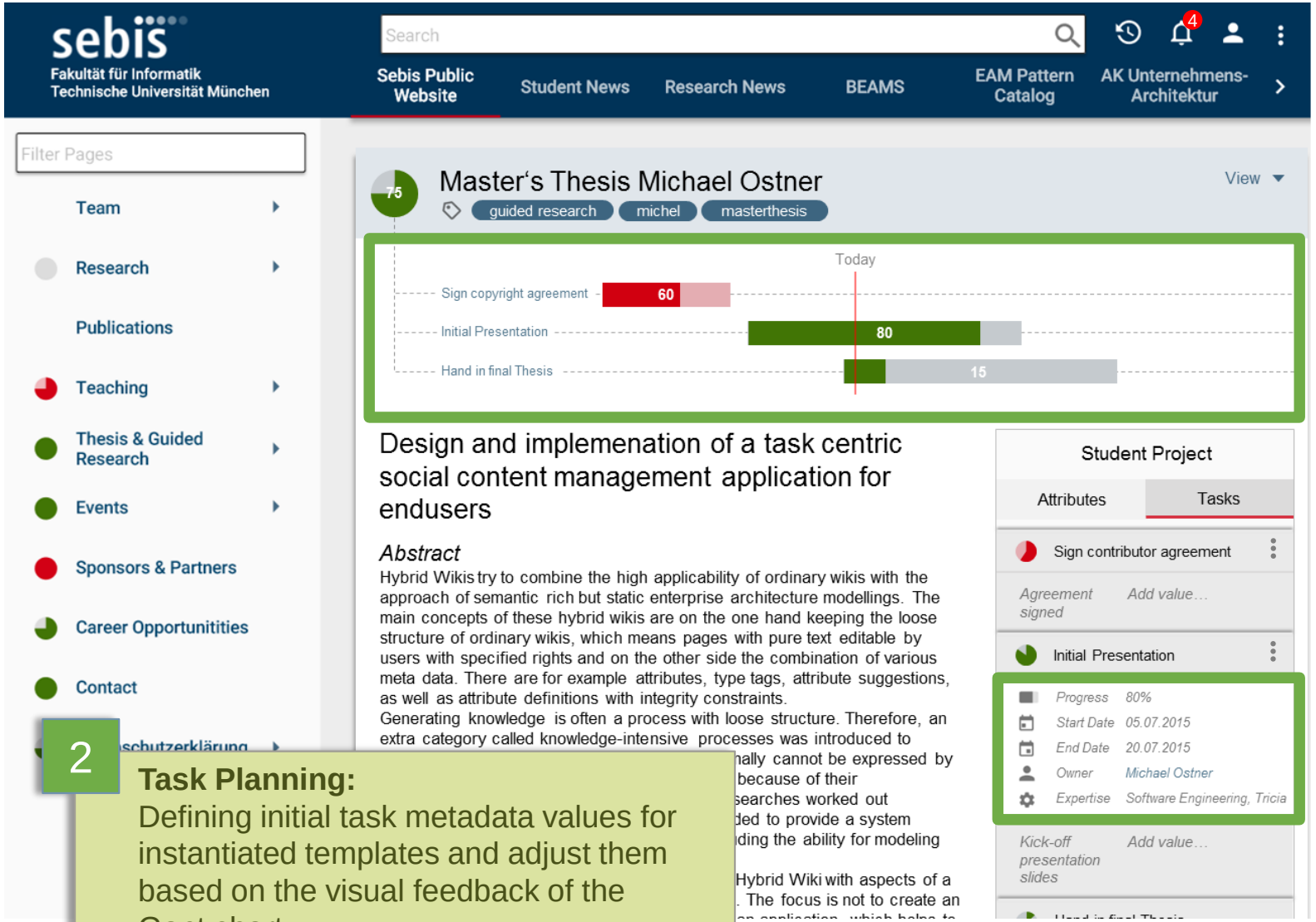
Source: adapted from Florian Katenbrink

SocioCortex – Use Case (1/6)



Source: adapted from Florian Katenbrink

SocioCortex – Use Case (2/6)



2

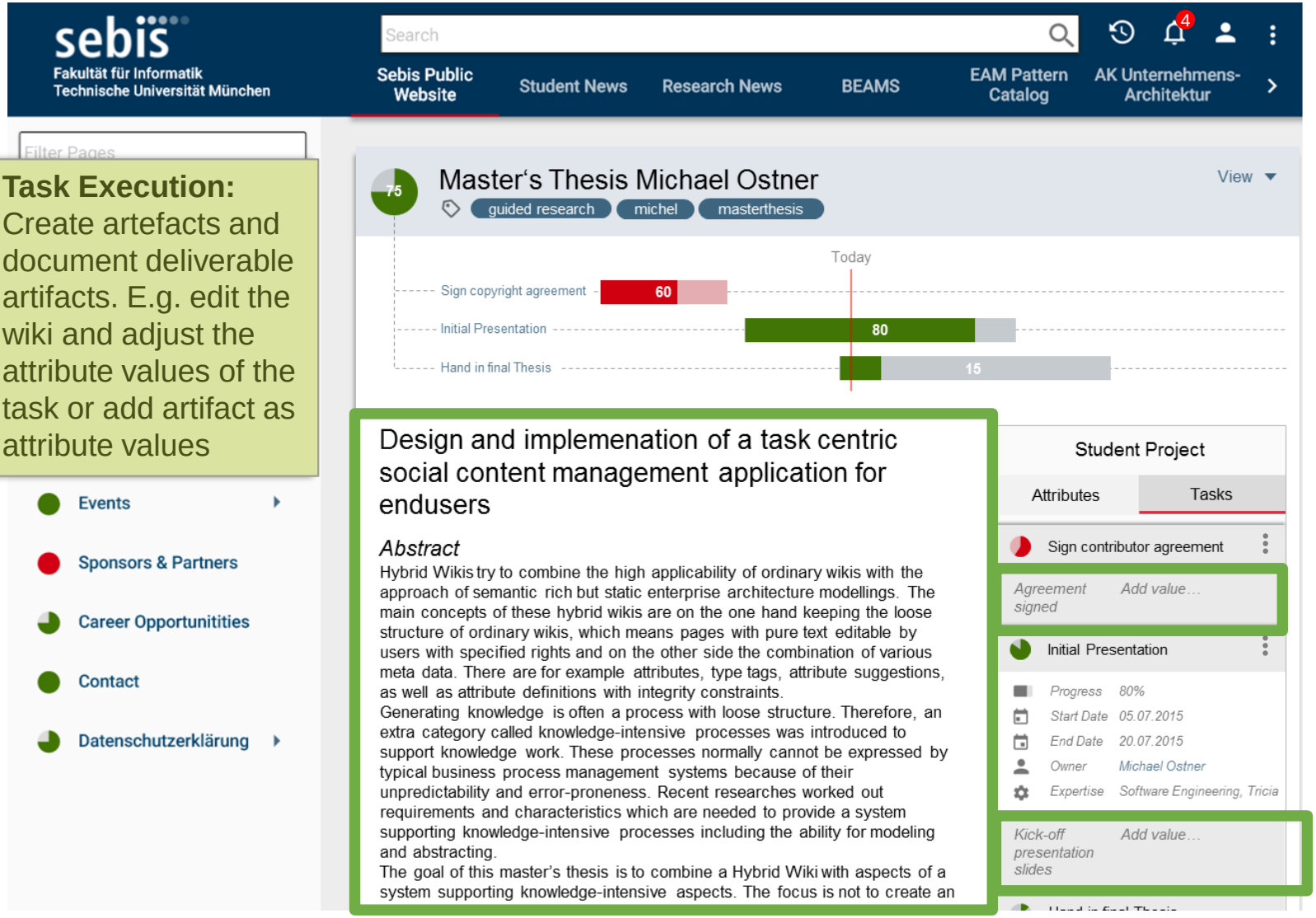
Task Planning:
Defining initial task metadata values for instantiated templates and adjust them based on the visual feedback of the Gant chart

Source: adapted from Florian Katenbrink

SocioCortex – Use Case (3/6)

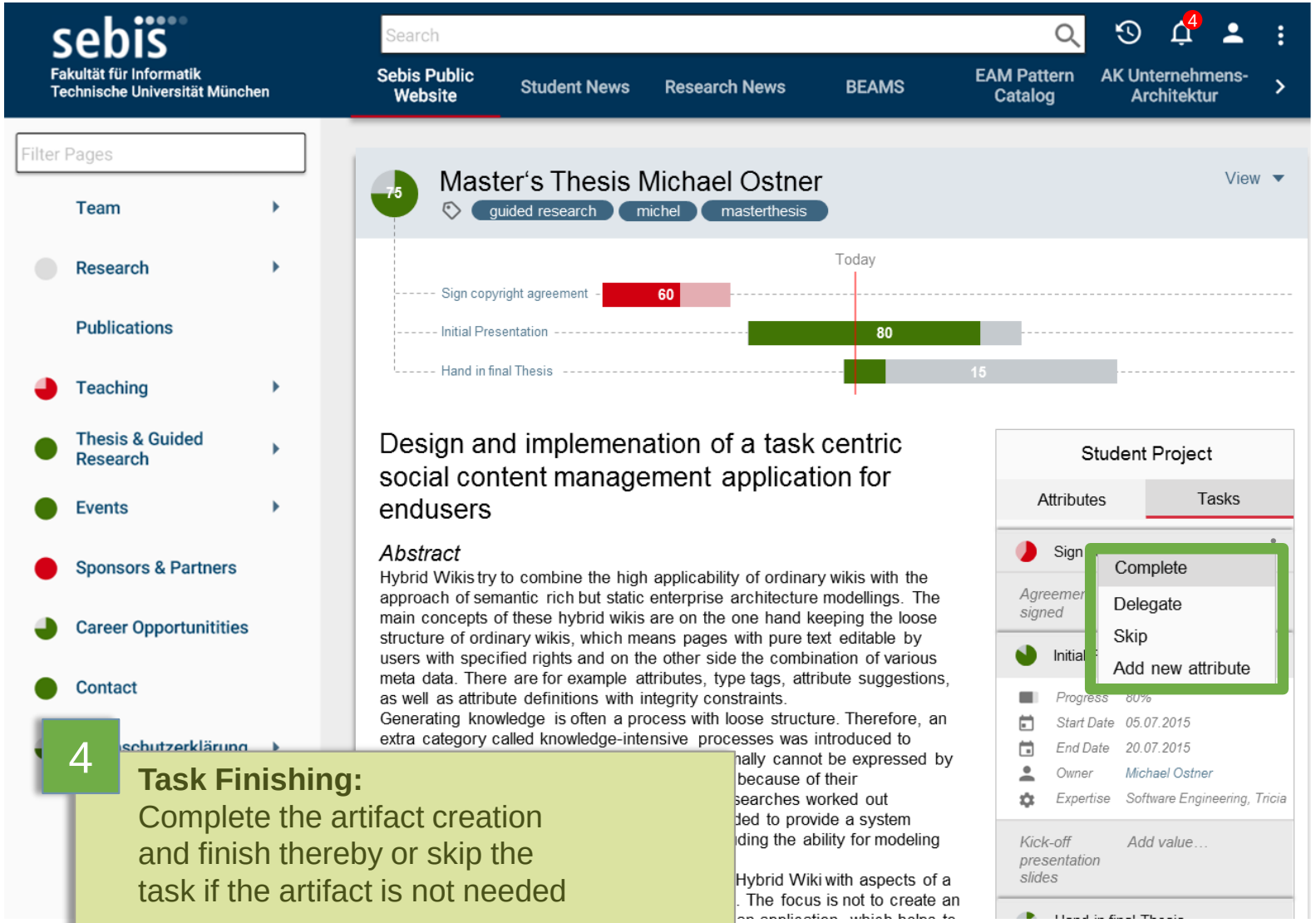
3

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



Source: adapted from Florian Katenbrink

SocioCortex – Use Case (4/6)

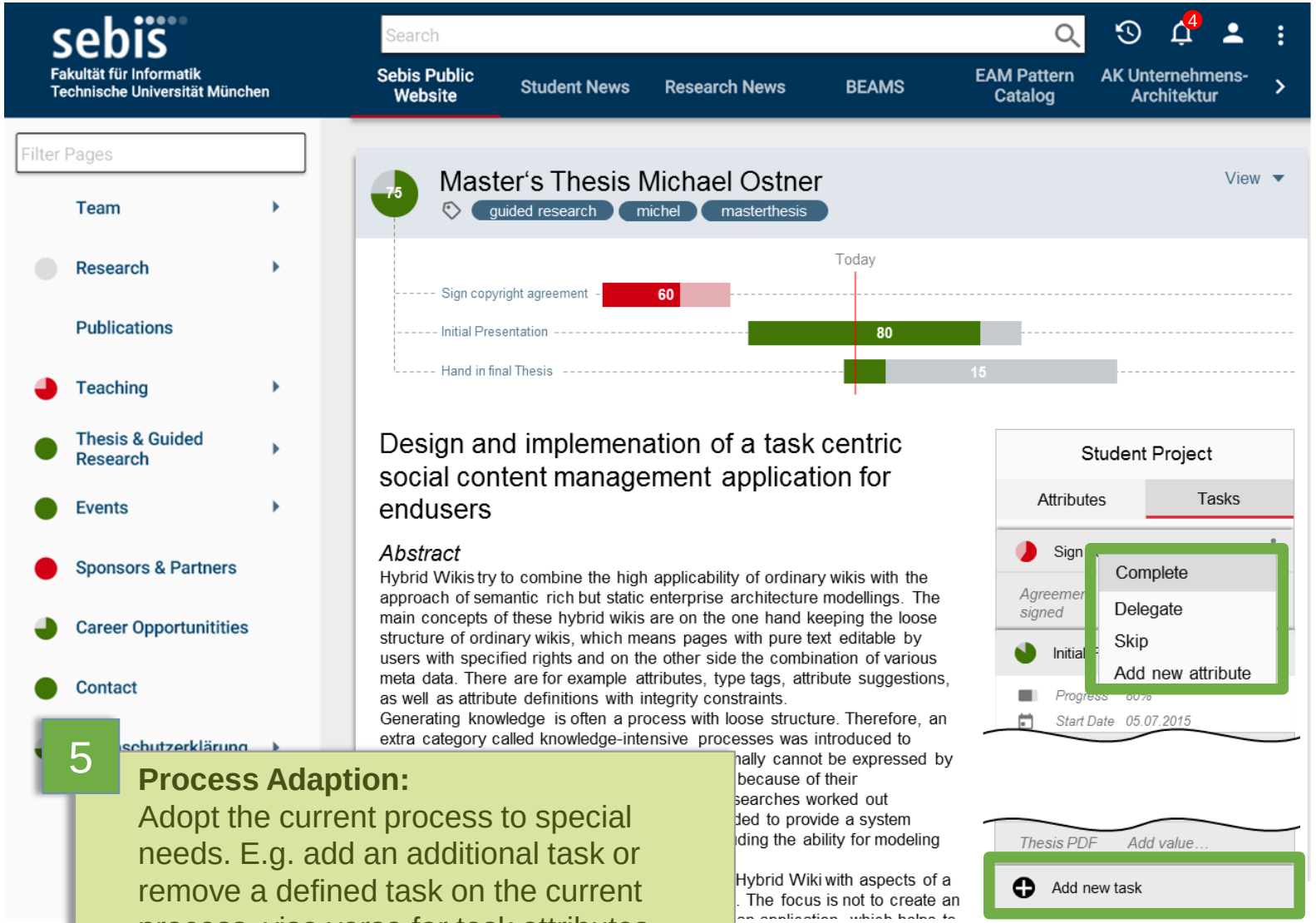


4

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

Source: adapted from Florian Katenbrink

SocioCortex – Use Case (5/6)

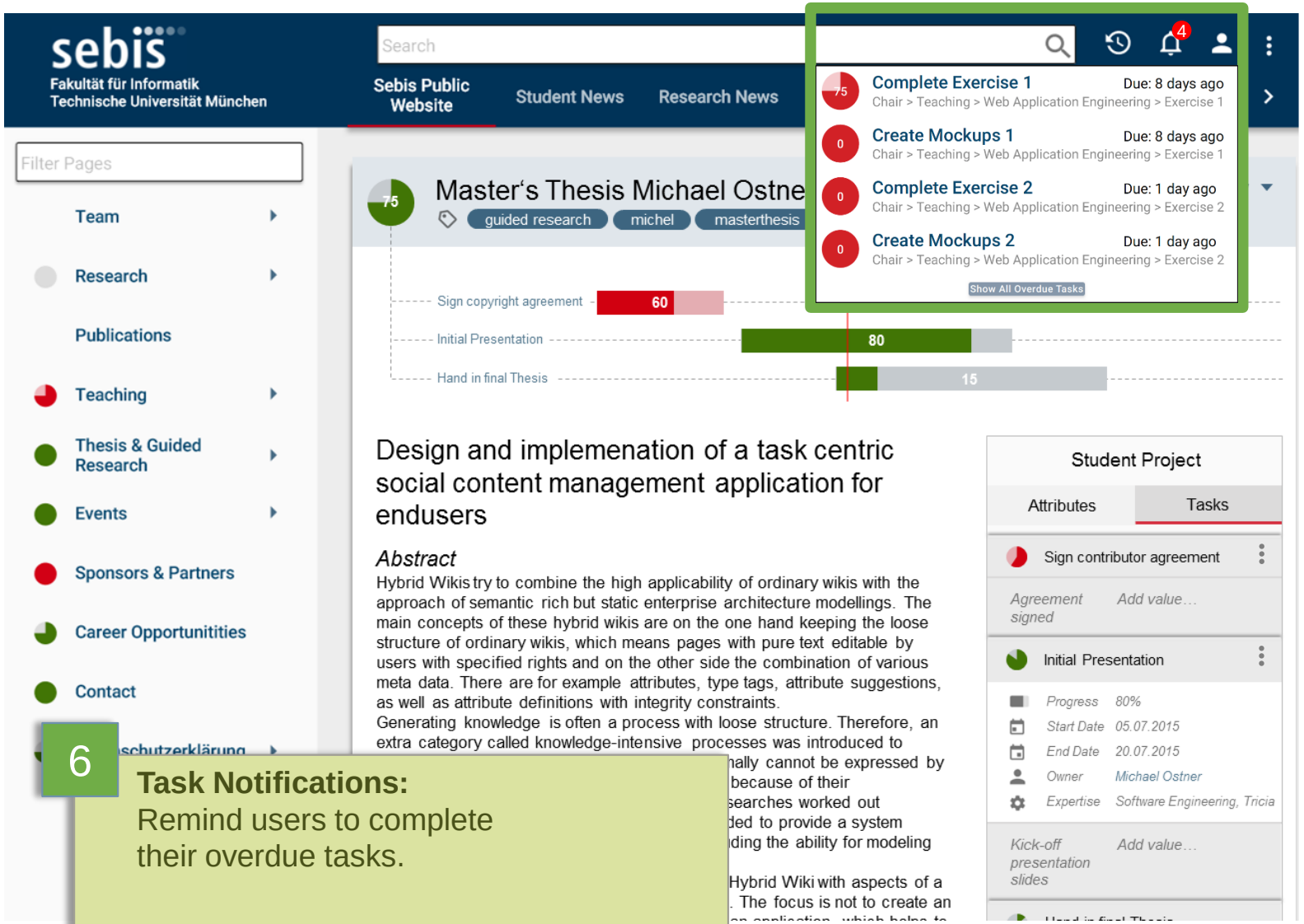


5

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

SocioCortex – Use Case (6/6)



Source: adapted from Florian Katenbrink

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Components of the application

sebis

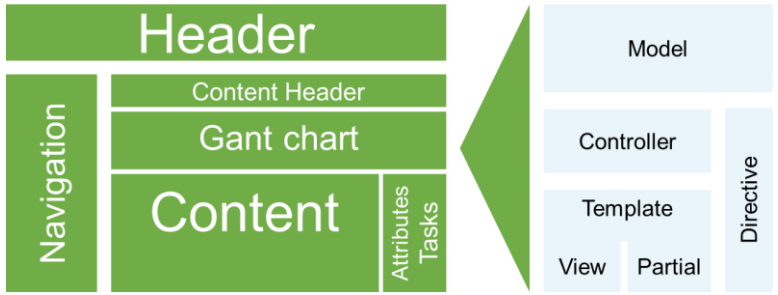
Frontend

Generic Socio Cortex Client

sc-angular

ANGULARJS by Google

Material Design



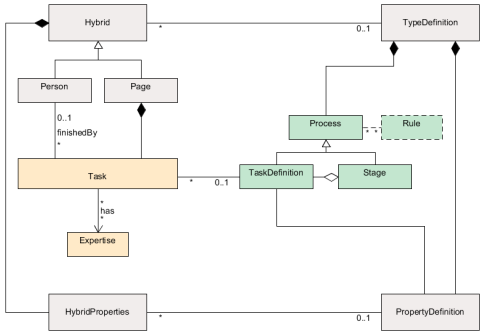
REST API

Backend

SocioCortex

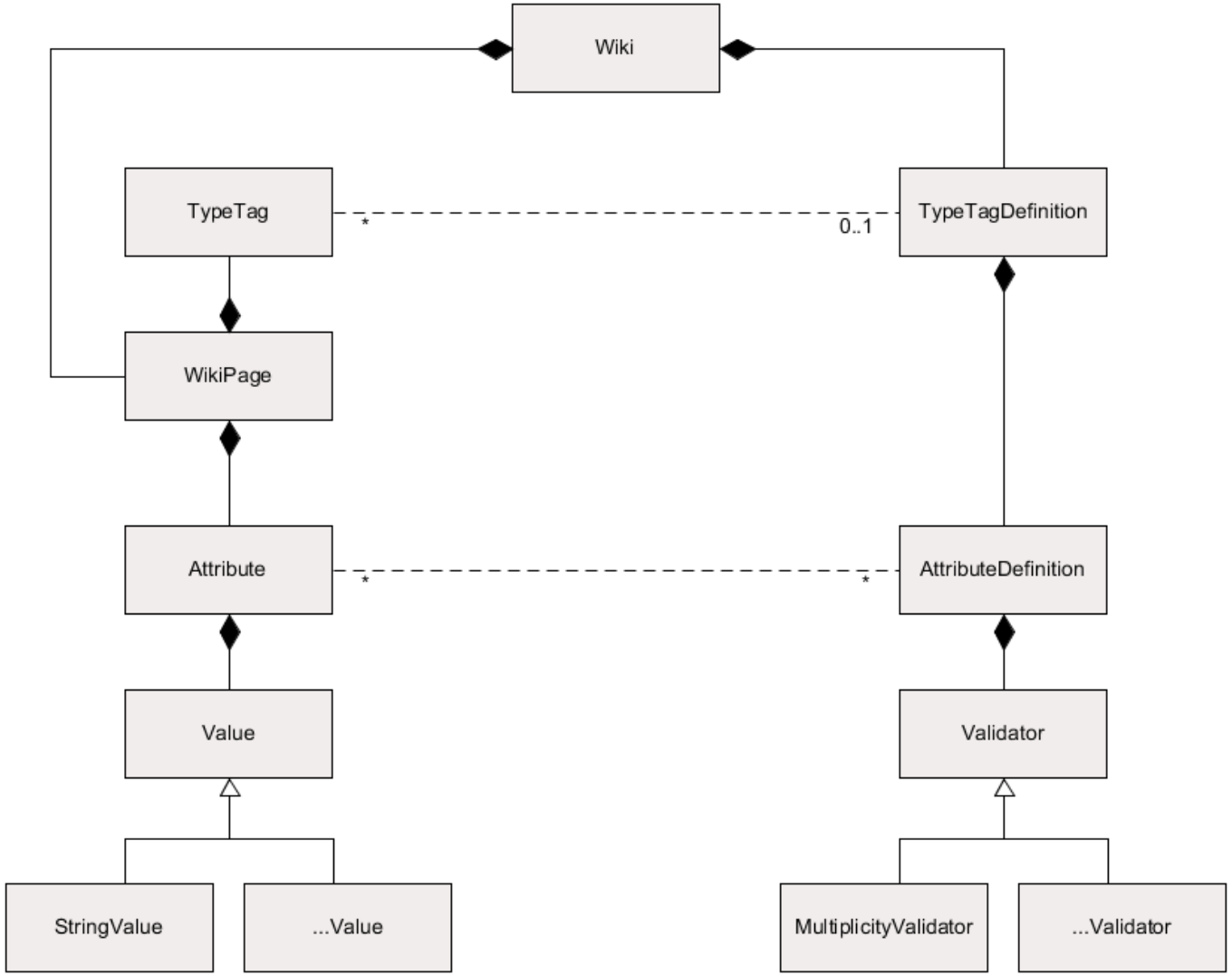
Java

SocioCortex



Hybrid Wiki

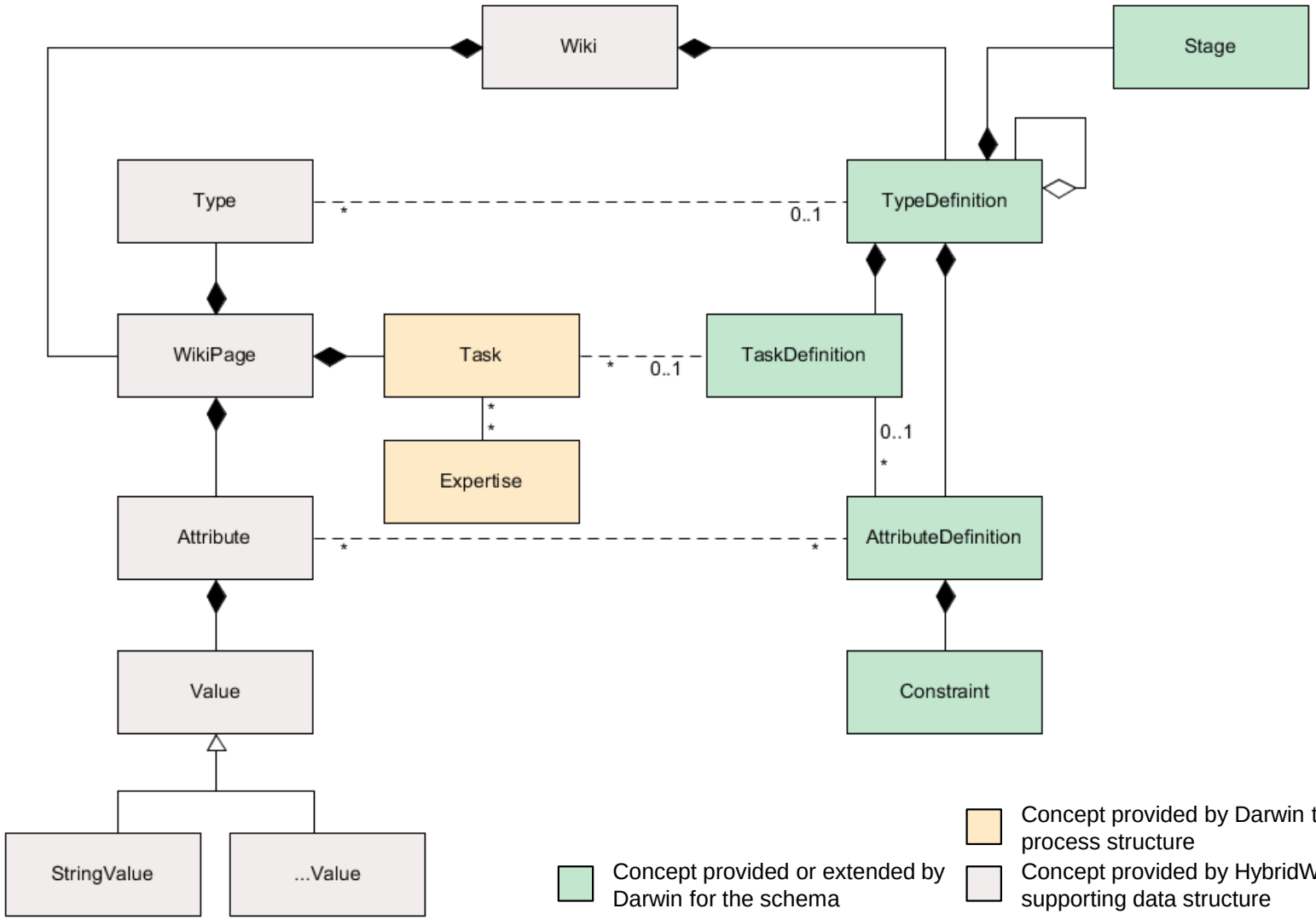
Conceptual model



Source: adapted from Matthes, 2011

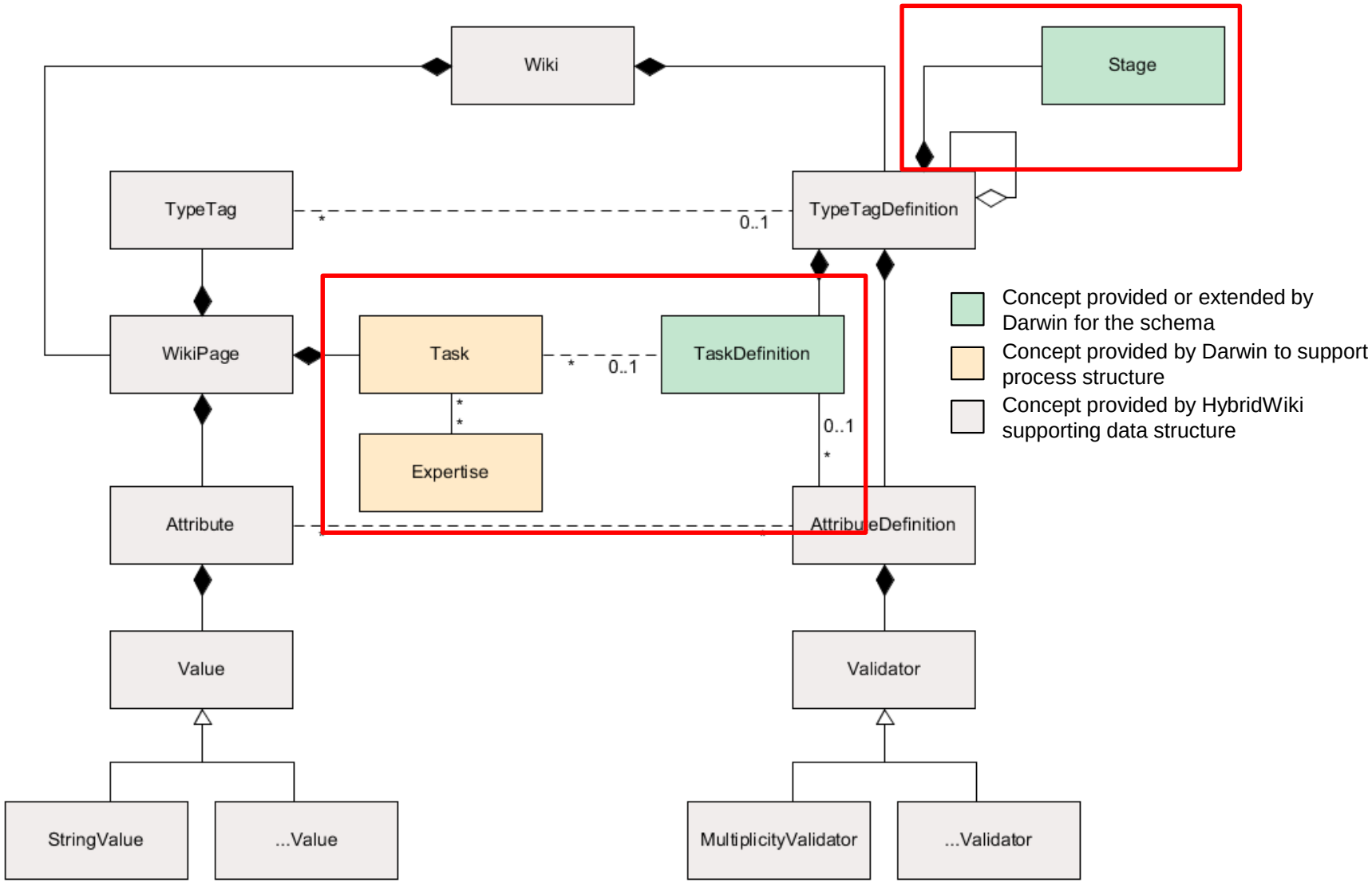
Darwin

Conceptual model



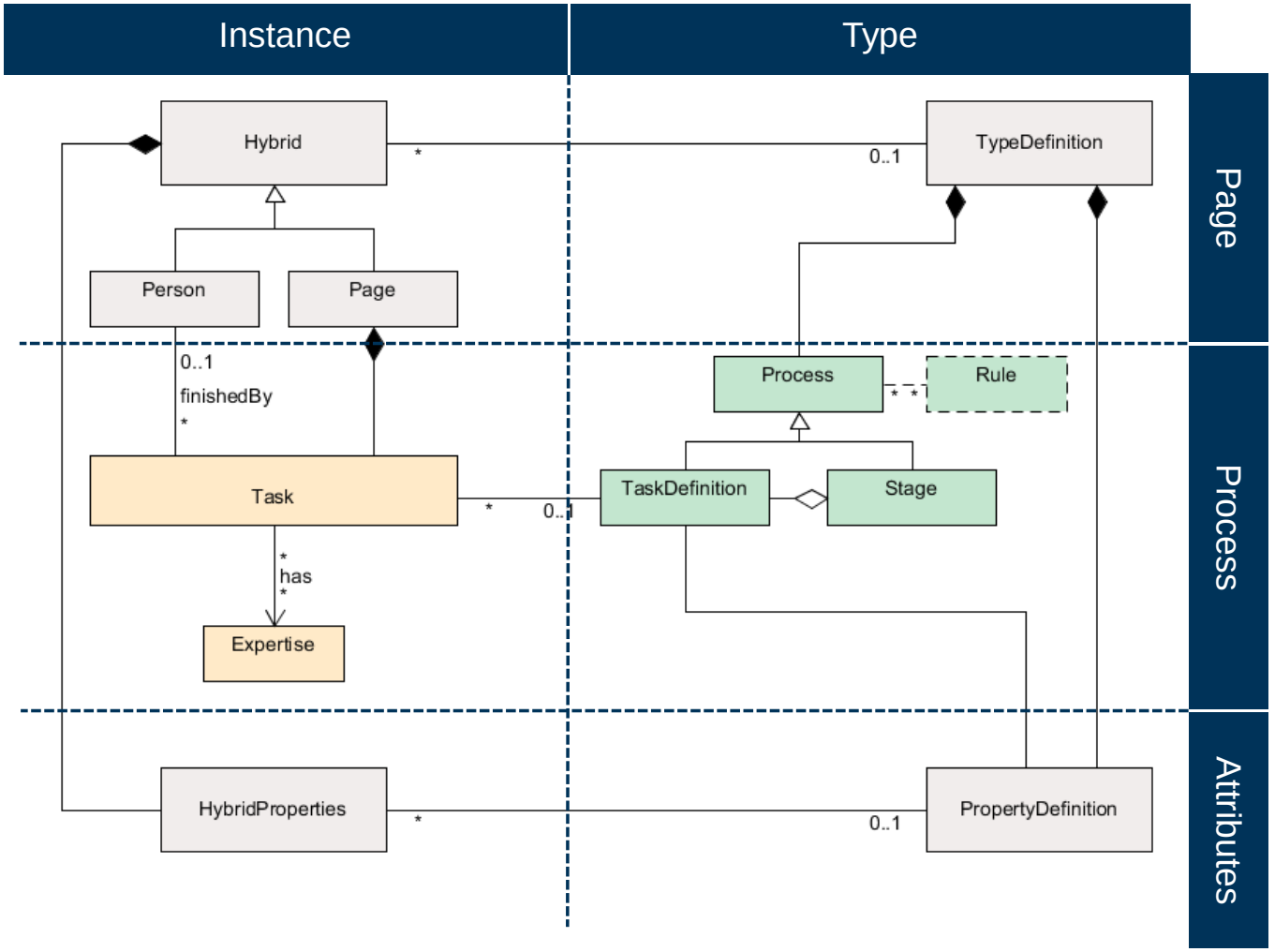
Source: adapted from Hauder, 2015

Hybrid Wiki concept extended with task-centric aspects



SocioCortex

Simplified target components



Concept provided or extended by Darwin for the schema

Concept provided by Darwin to support process structure

Concept provided by HybridWiki supporting data structure

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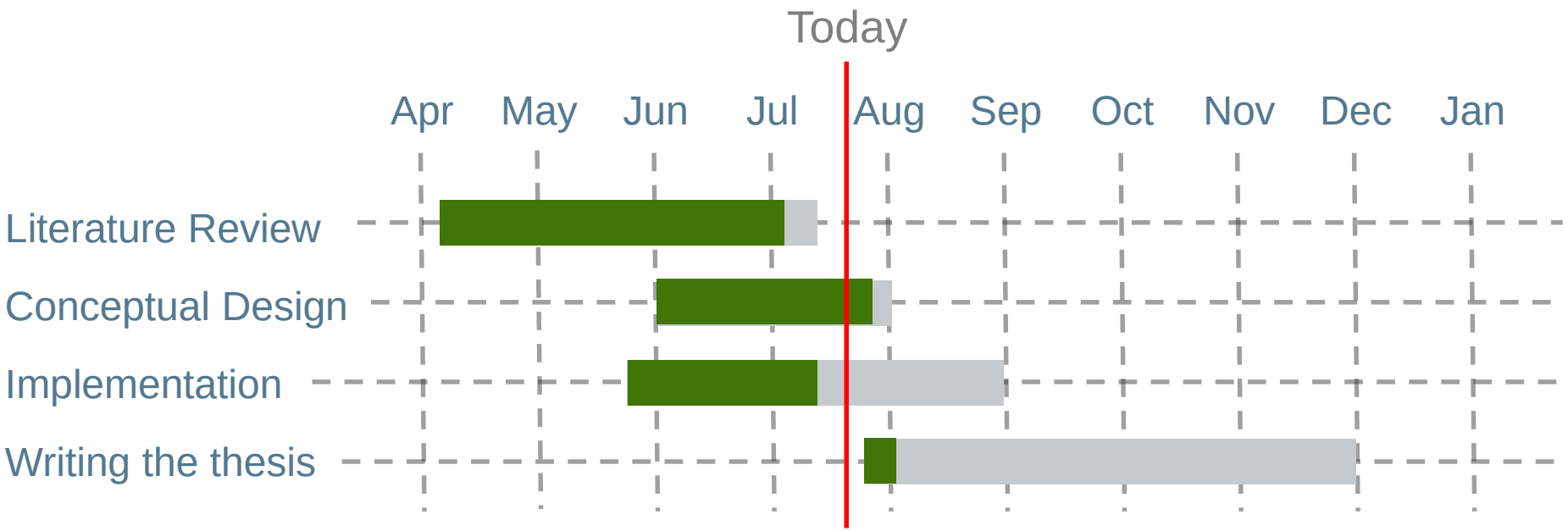
Roadmap


Today
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Jan
Literature Review
Conceptual Design
Implementation
Writing the thesis

Discussion

Michael Ostner
B. Sc.

Technische Universität München
Department of Informatics
Chair of Software Engineering for
Business Information Systems

Boltzmannstraße 3
85748 Garching bei München

michael.ostner@tum.de
wwwmatthes.in.tum.de