

# Implementing a Web Client for Integrated Data, Role, Function, and Task Modelling

Master's Thesis kick-off presentation

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- 1. Introduction**
  - 1. Role Model**
  - 2. Task Model**
  - 3. Function Model**
  - 4. Integrated Model**
- 2. Research Objective and Questions**
- 3. Mock-Ups**
- 4. Timeline**



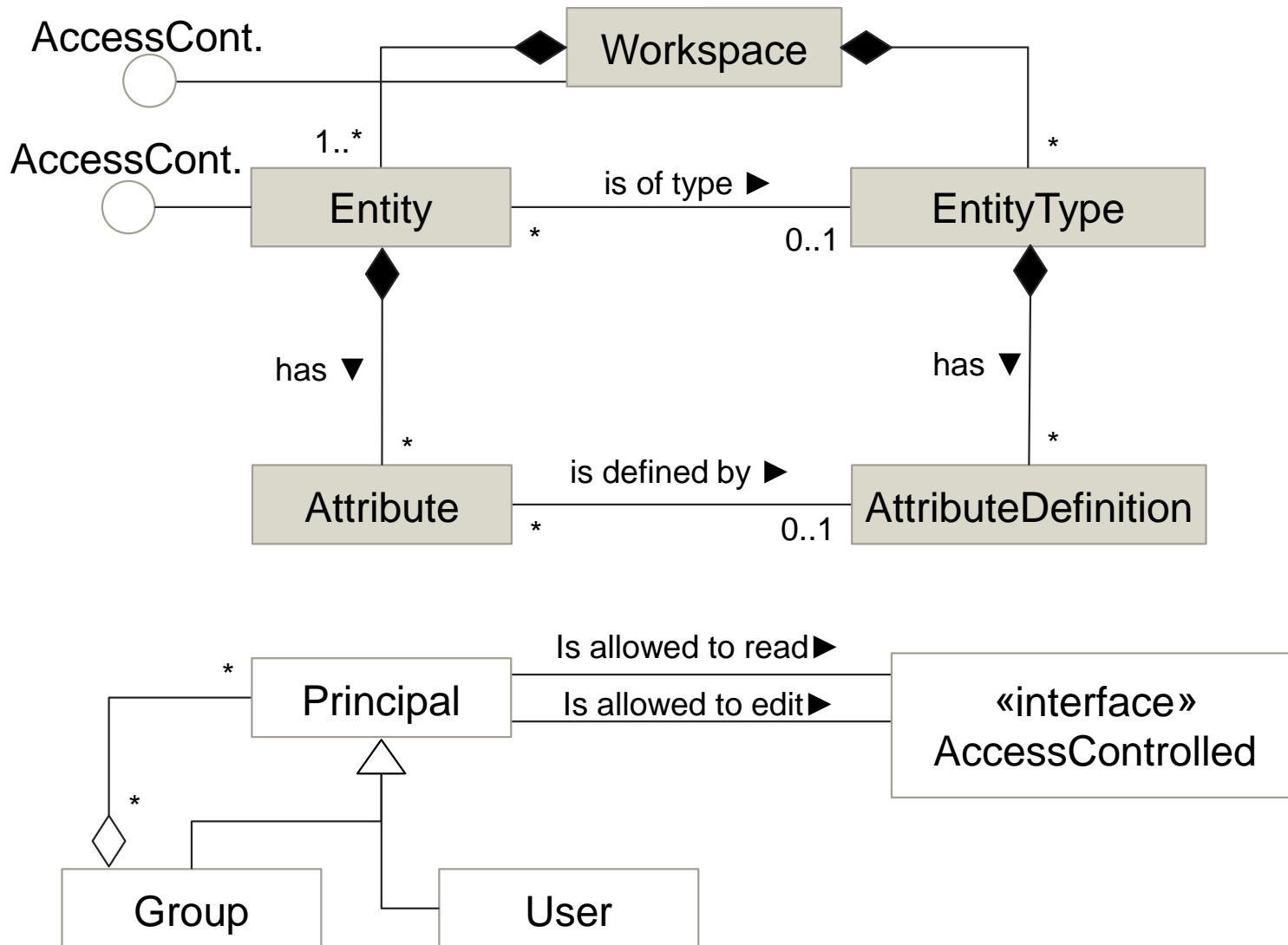
Hybrid Wikis as a tool to model enterprise information systems

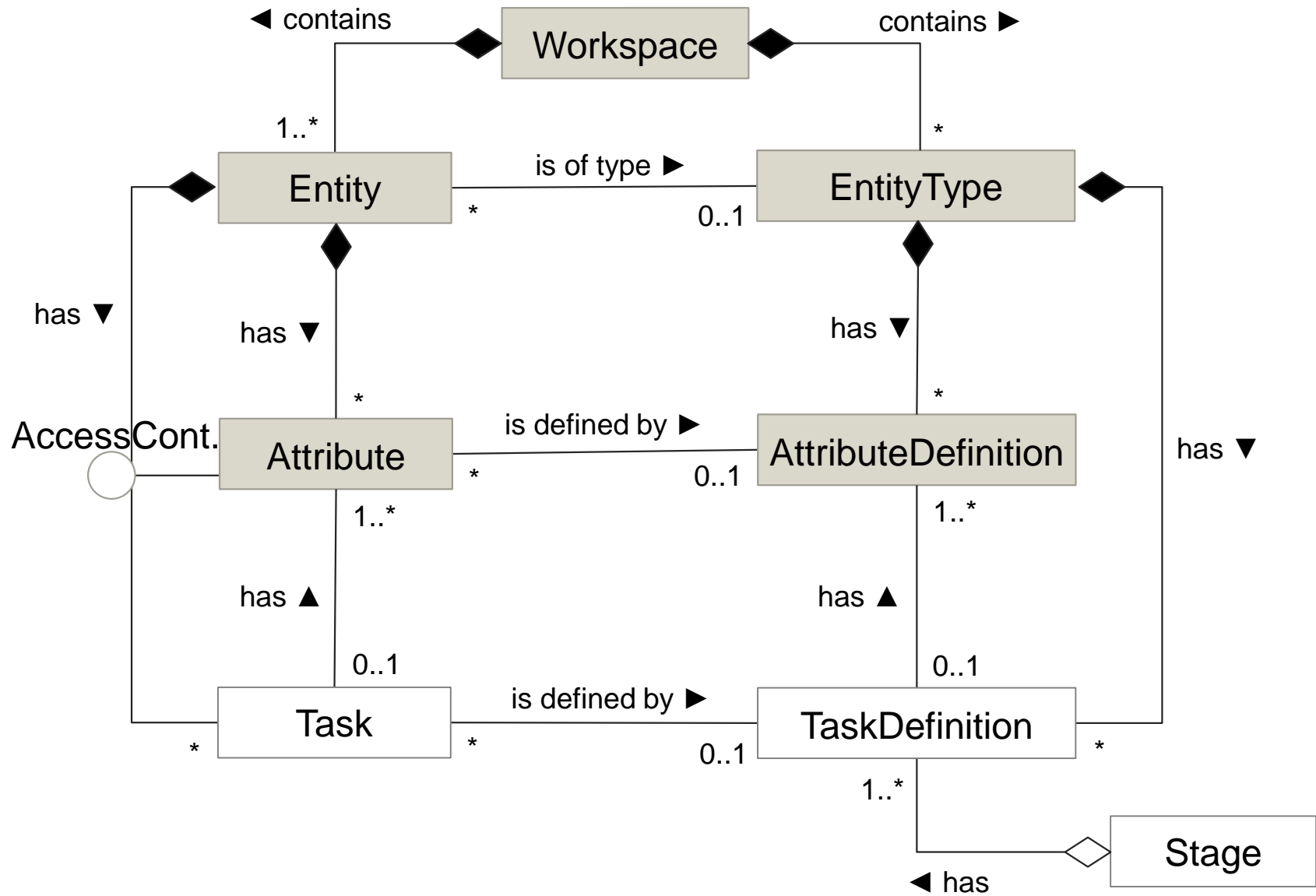


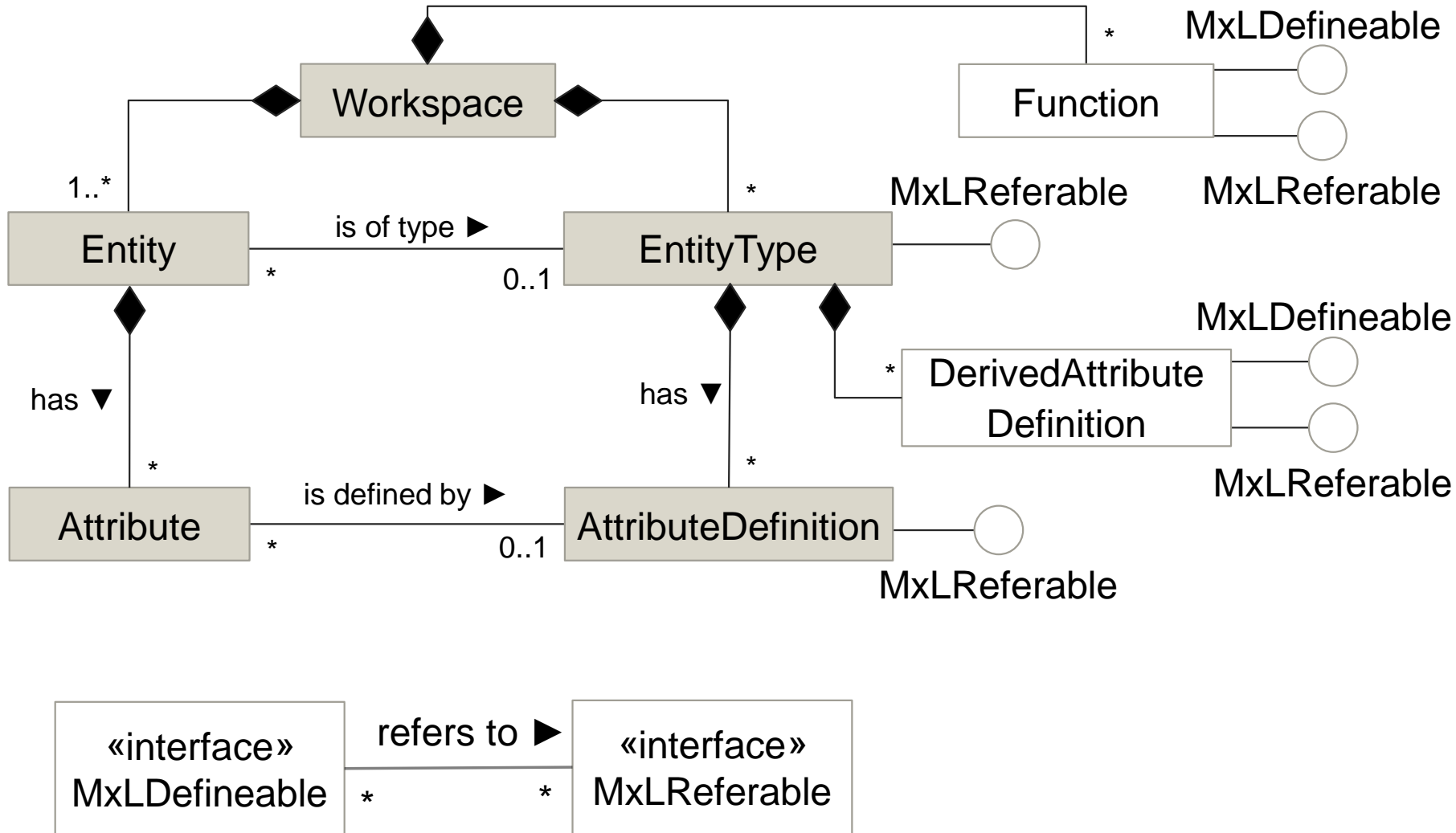
Hybrid Wikis are currently missing an integrated user-interface for data, role, function and task modelling

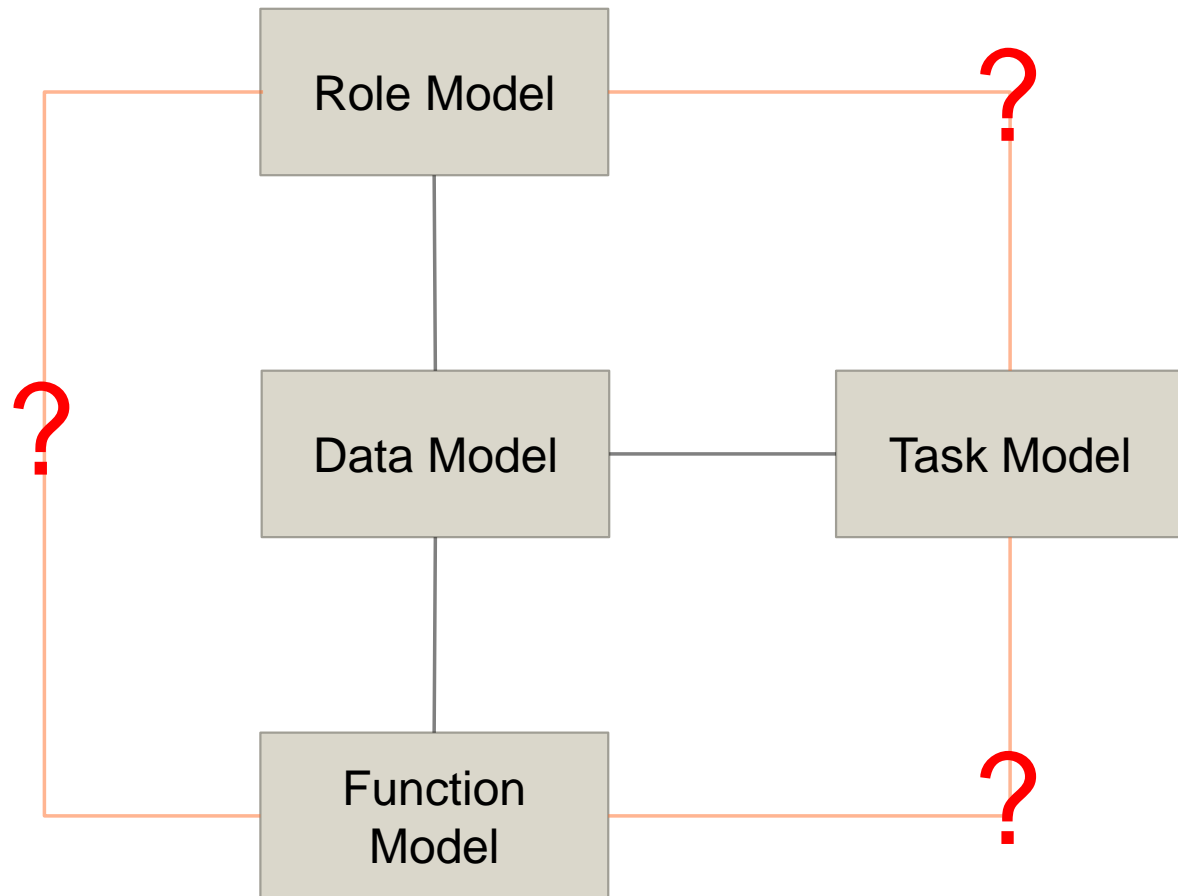


The prototype implemented during this thesis









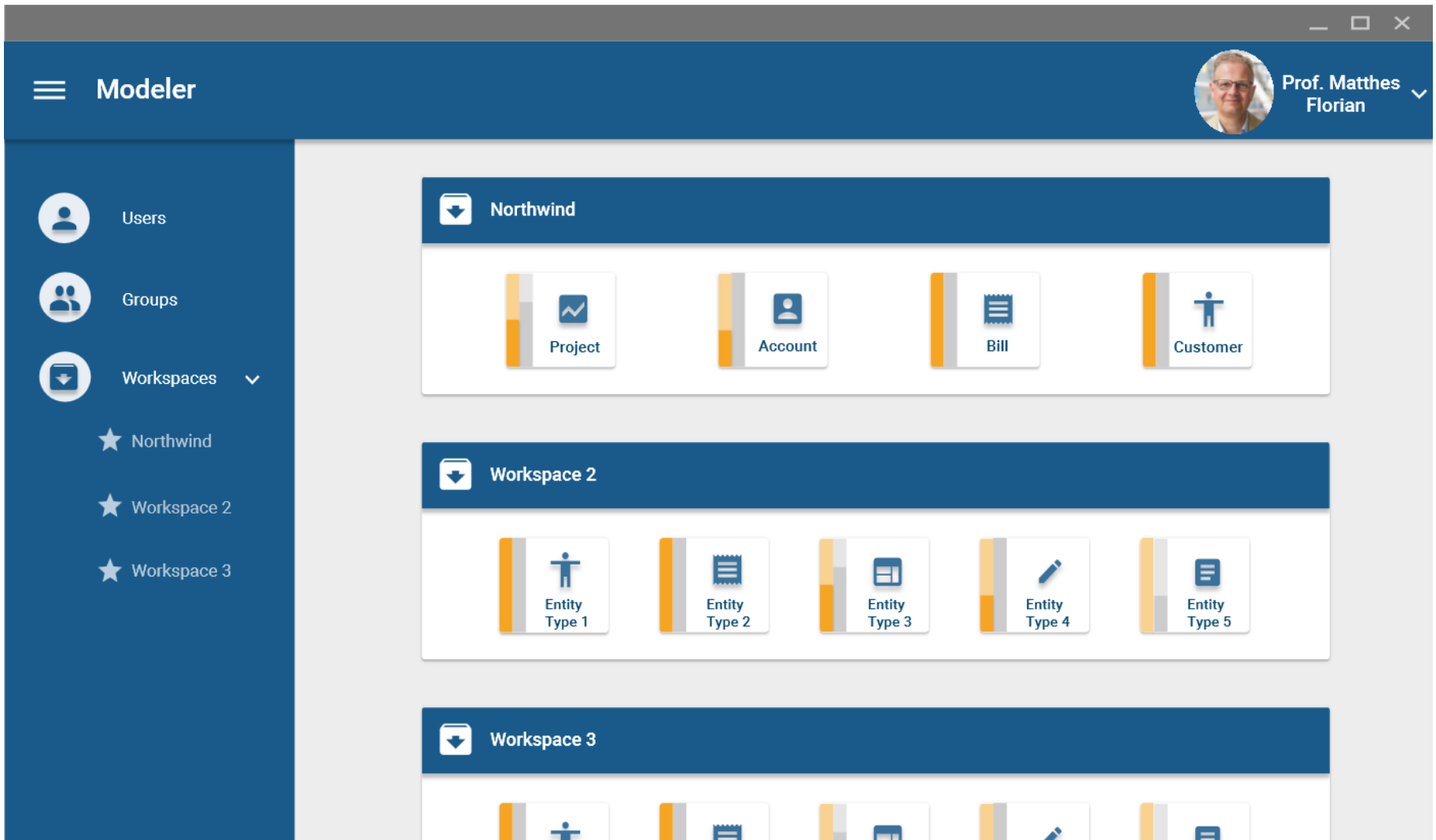
**Research Objective:** Facilitate data, role, function and task modelling within a hybrid wiki platform with the help of a web based user interface to provide a way to generate and administrate the above mentioned models.

## **Research Questions:**

Q1: „How does an integrated meta-model for data, role, function and task models look like?

Q2: „How to design an integrated user interface for the management of data, role function and task models?“





All Mock-Ups made by: Sirma Gjorgievska

Modeler > Northwind  
Workspace

Prof. Matthes Florian

Search Entity Types

Entity Types

- Project
- Account
- Bill
- Customer

DASHBOARD    FUNCTIONS    SETTINGS

### Most used Entity Types

Entity Type	Usage
Entity Type 1	[Progress bar]
Entity Type 2	[Progress bar]
Entity Type 3	[Progress bar]
Entity Type 4	[Progress bar]
Entity Type 5	[Progress bar]
Entity Type 6	[Progress bar]

### UML Diagram

```
classDiagram
    class Account
    class Project
    class Bill
    class Customer
    Account "*" -- "1" Project : project
    Account "*" -- "1" Customer : account
    Bill "*" -- "1" Customer : customer
```

### Entity Types to be consolidated

- Project
- Account
- Bill
- Customer

Modeler > Northwind > Customer

Workspace Entity Type

Prof. Matthes Florian

Search Entity Types

Entity Types

- Project
- Account
- Bill
- Customer

ATTRIBUTE DEFINITIONS TASK DEFINITIONS SETTINGS DERIVED ATTRIBUTE DEFINITIONS

Text	Last name	Any Number Value	⋮
Account	Account	Any Number Value	⋮
Enumeration	Enumeration	Any Number Value	⋮
+ Add Attribute Definition	Click here to add an Attribute Definition		

Modeller > Northwind > Customer

Workspace Entity Type

Prof. Matthes Florian

Search Entity Types

Entity Types

- Project
- Account
- Bill
- Customer

ATTRIBUTE DEFINITIONS TASK DEFINITIONS SETTINGS **DERIVED ATTRIBUTE DEFINITIONS**

MxL	Name	Number	Visible	
Derived Att. Definition	Age		<input type="checkbox"/>	^
Description	Calculate age			
Expression	Today - 'Birth date'		13/200	
			20/200	

Add Derived Att. Definition

Click here to add a Derived Attribute Definition

Modeler > Northwind > Customer

Workspace Entity Type

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Search Entity Types

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- Customer**

ATTRIBUTE DEFINITIONS TASK DEFINITIONS SETTINGS DERIVED ATTRIBUTE DEFINITIONS

**Task Def** Signed contract agreement

Project	Link	At least one	
Type	Enumeration	At most one	
Student	Link	At most one	
Student advisor	Link	At least one	
<a href="#">Add Attribute Definition</a>	Text		
Title (en)	Text		

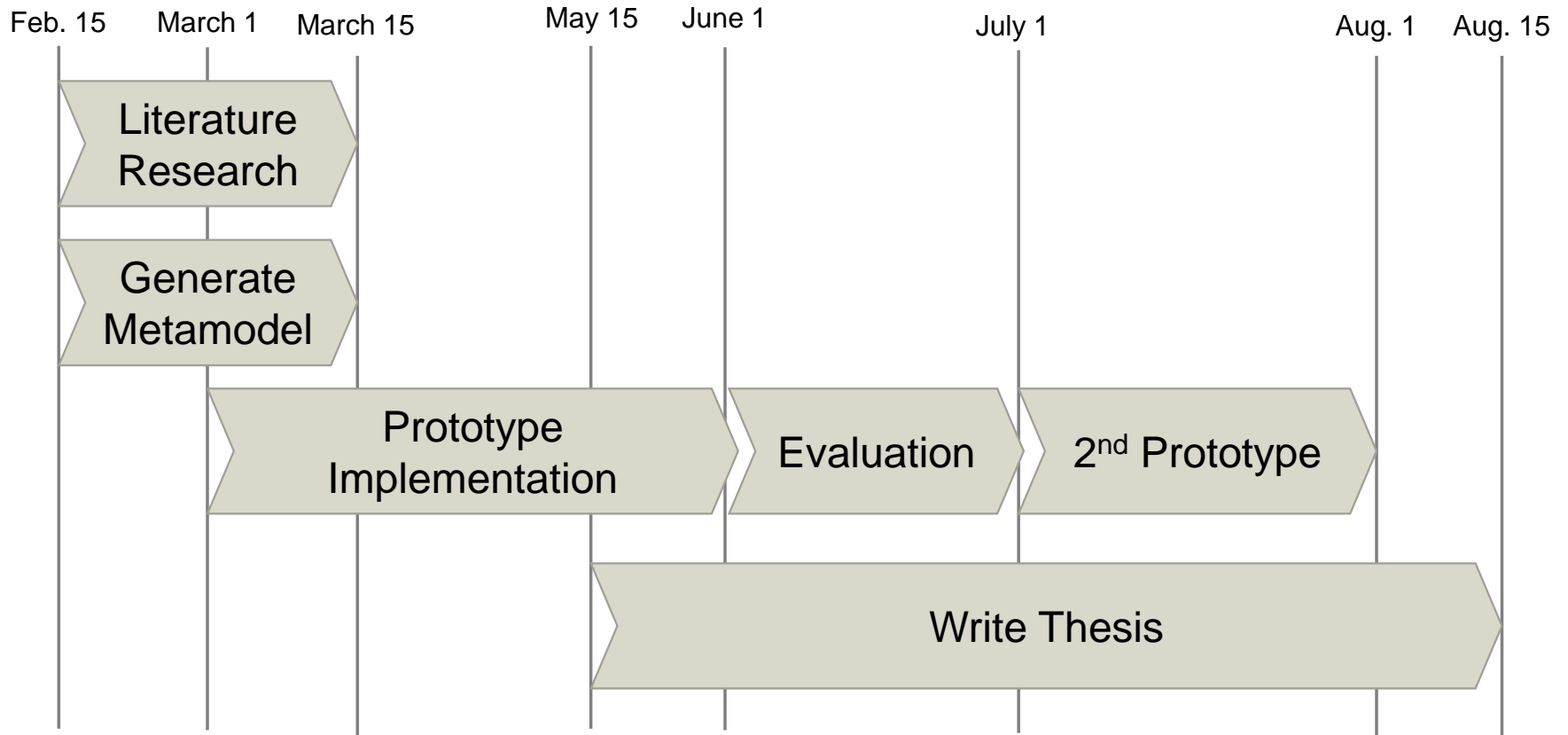
[Add Task Definition](#) Click here to add a Task Definition

**Recommended Task Definition**

Title (de)	Text	
Title (en)	Text	

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Thank you for your attention.



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- [2] Matthes, Florian; Neubert, Christian; Steinhoff, Alexander (2011): Hybrid Wikis: Empowering Users to collaboratively structure Information
- [3] Reschenhofer, Thomas; Bhat, Manoj; Hernandez-Mendez, Adrian; Matthes, Florian (2016): Lessons Learned in Aligning Data and Model Evolution in Collaborative Information Systems