



# NAVIGATION MODELLING IN HYPERMEDIA APPLICATIONS

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# Motivation

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- To design
  - Interactivity of hypermedia
  - Several users - several ways of browsing

➤ **Navigation**

➤ **Adaptation**

# Requirements

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- Nodes and their structuring
  - Mapping to concepts or information fragments
- Interconnections between nodes
- Guarding the availability of interconnections and nodes to a user or environment

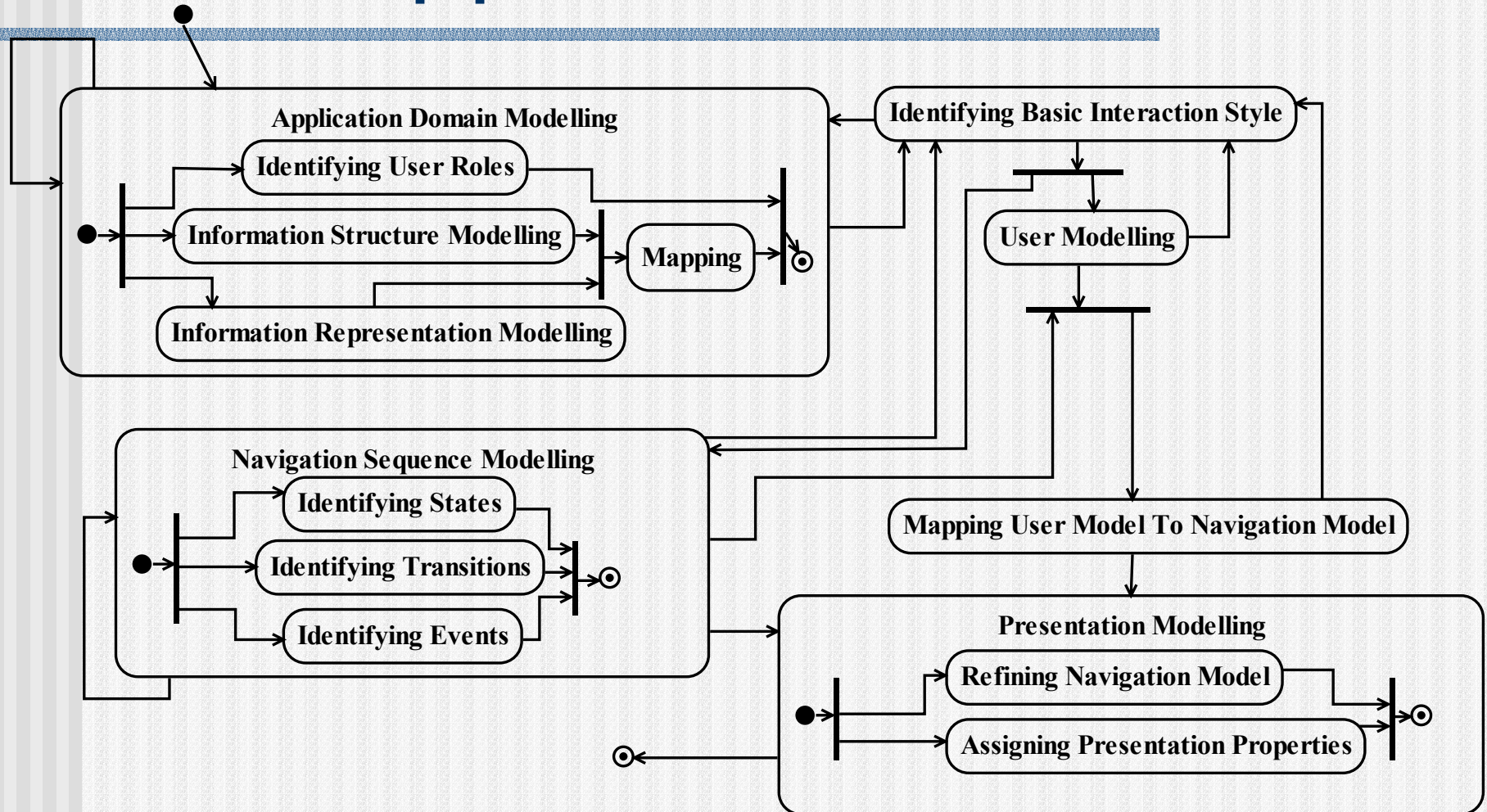


# Current approaches

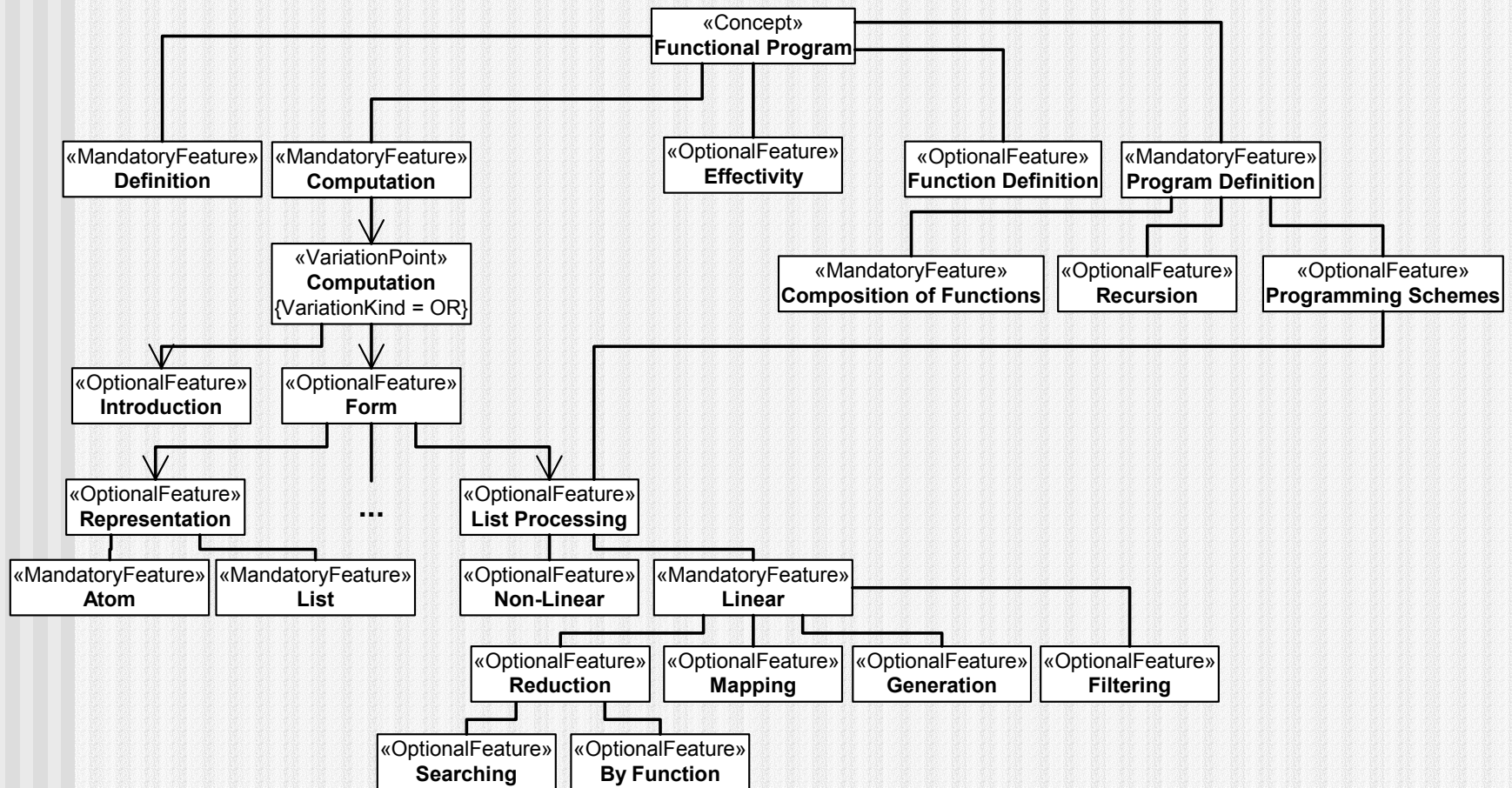
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- OOHDM
  - UHDM
  - Petri nets ( $\chi$ Trellis)
  - Hypercharts (Paulo et al. - XHMBS - 1998)
  - AHAM
- **To provide an approach:**
- **where adaptivity is considered**
  - **where interactivity can be modelled**

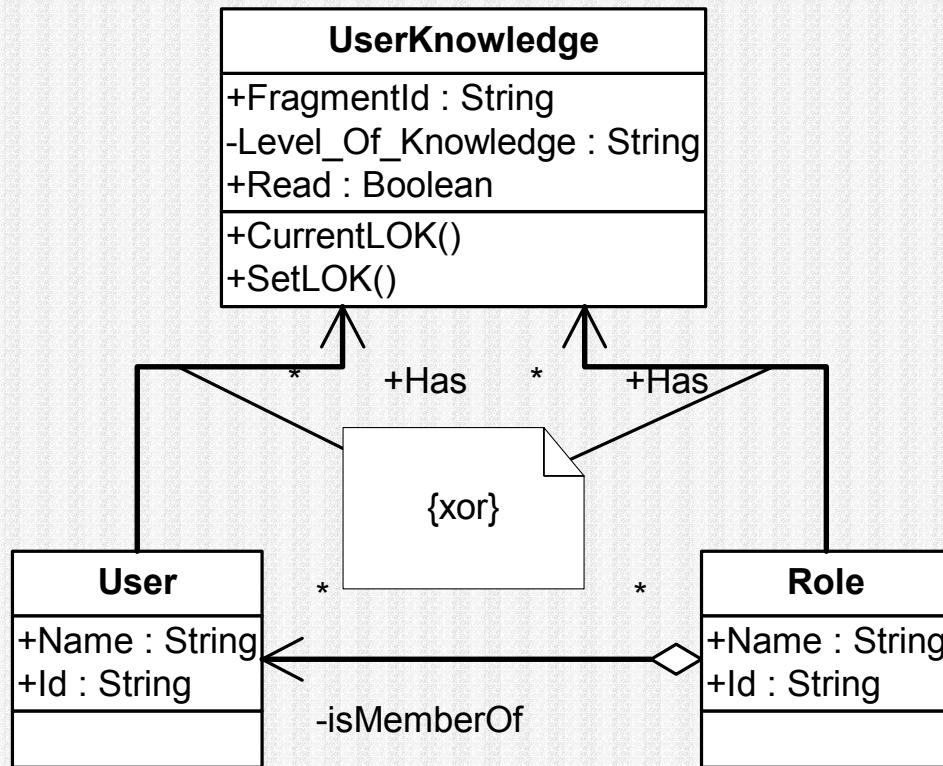
# Our Approach



# Domain Model

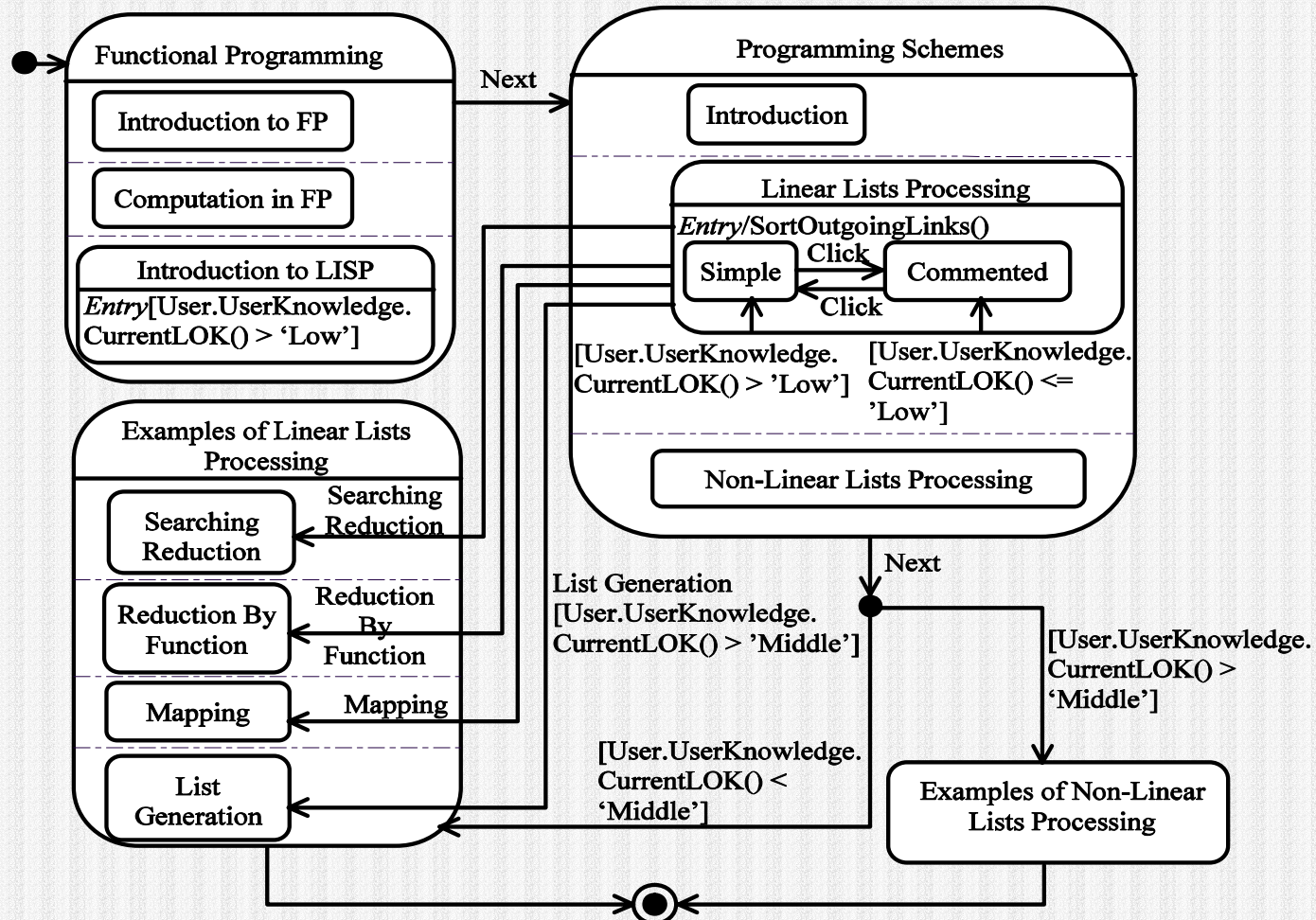


# User Model





# Navigation Model



# Prototype – Domain

**Domény**

- [Evidencia časopisov](#)
- [Časopis](#)
- [Článok](#)
- [Pisateľ](#)
- [Krajina](#)

**Navigačné triedy**

- [Podrobný výpis časopisu](#)
- [Výpis článku](#)
- [Stručný výpis časopisu](#)

**Navigačné kontexty**

- [Časopisy podľa mesiaca vydania](#)
- [Články podľa autora](#)
- [Časopisy podľa krajiny](#)
- [Podrobný výpis časopisu](#)

[Zobrazenie systému](#)

**Koncept: Časopis**

[Vytvor inštanciu](#)

**Atribúty**

Názov	Typ	Stereotyp
Názov	Reťazec	Primárny
Rok	Číslo	Informačný
Mesiac	Číslo	Informačný

[Pridať atribút](#)

**Väzby konceptu**

Názov	Ku konceptu
Vychádza v	Krajina

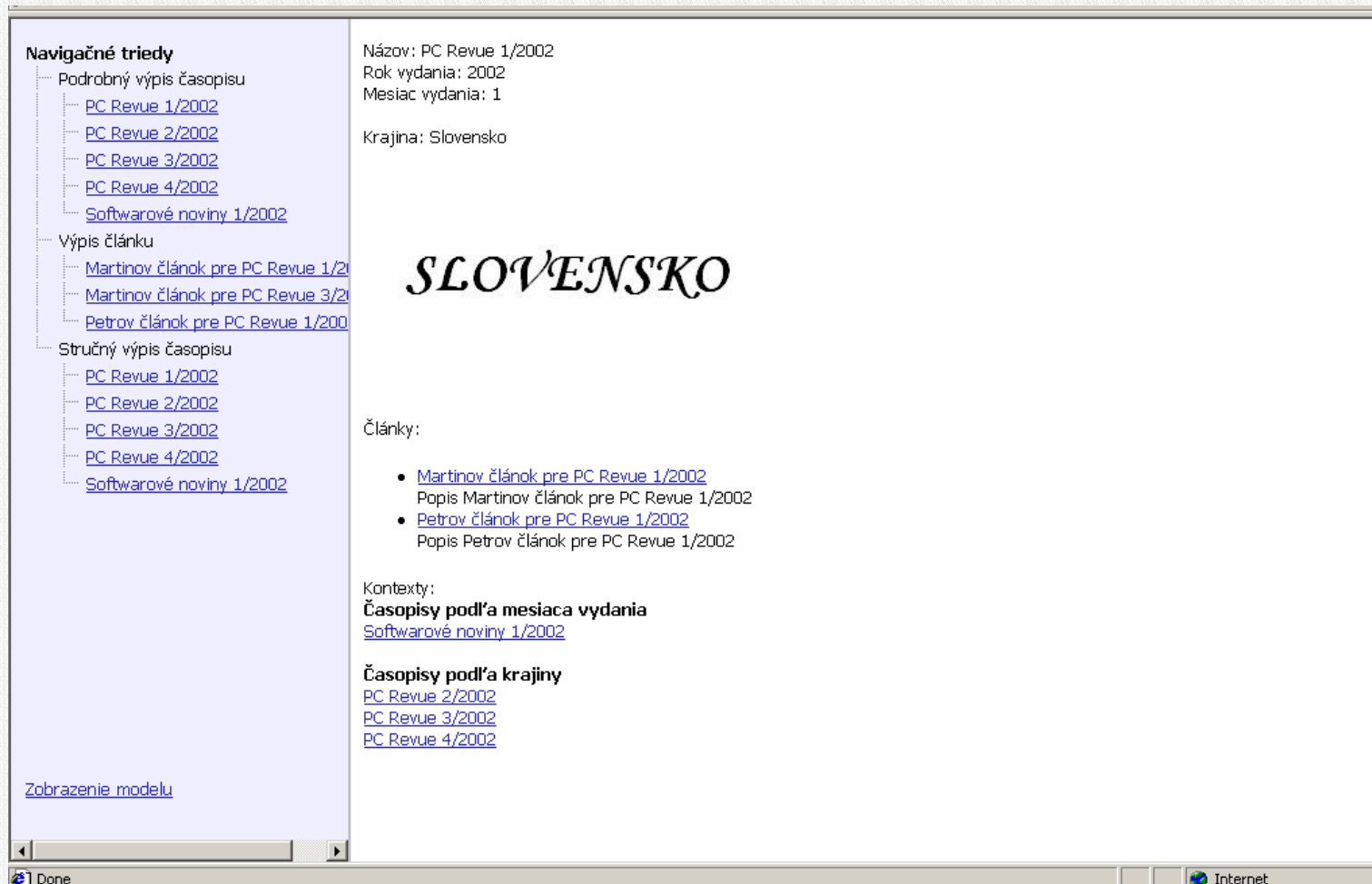
[Pridať väzbu](#)

**Väzby ku konceptu**

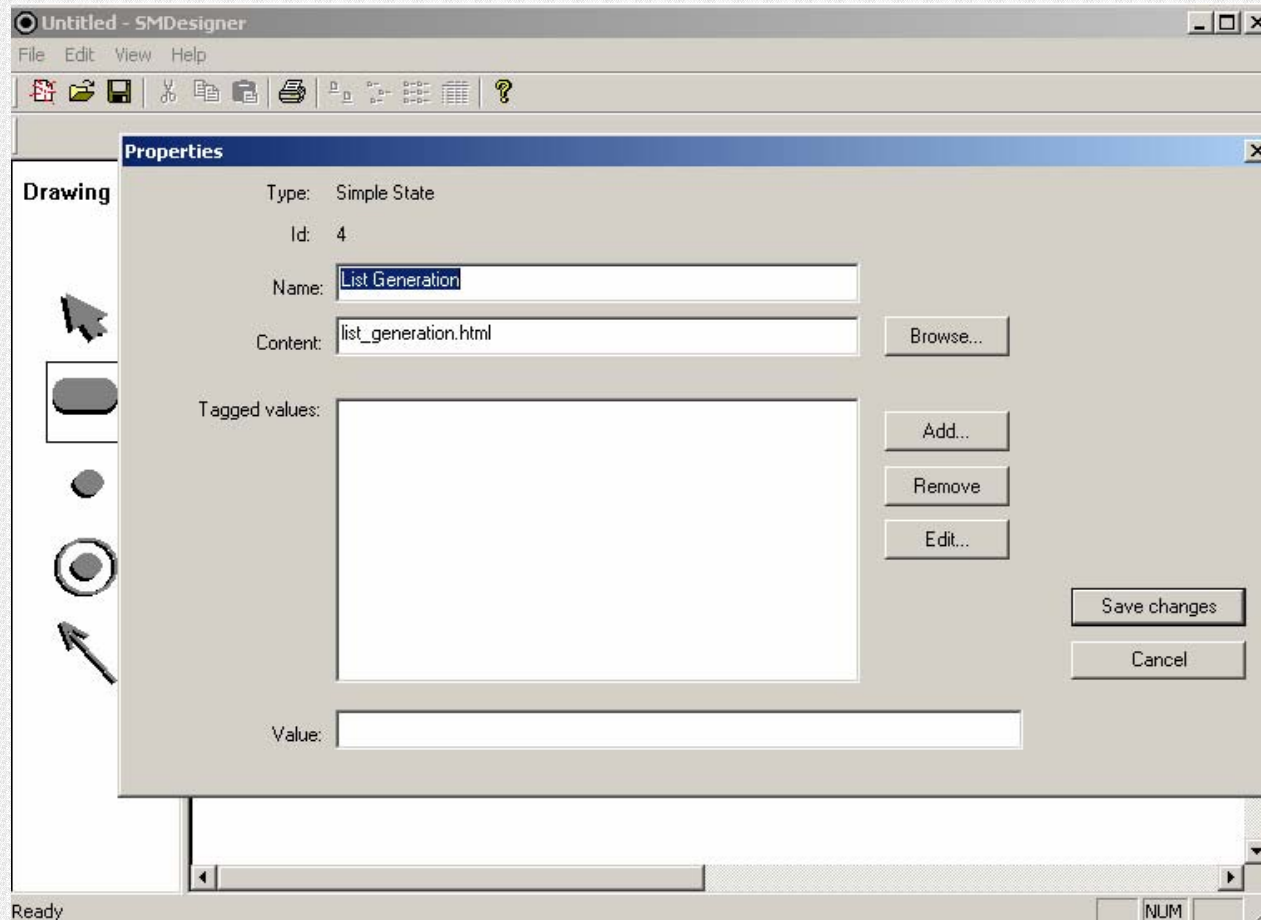
Názov	Od konceptu
Vychádza v	Článok



# Prototype - Presentation



# Prototype - Navigation





# Conclusions and Further Work

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- Application of state machines
  - Integration with user model
  - Embedded adaptation rules
  - Domain modelling for hypermedia
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- **Formalizing models dependencies**
  - **Tool support**