User Modeling and Personalization
2: AEHS & Stereotypes

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Exercise 1: Adaptive Educational Hypermedia Systems (AEHS)

Develop an AEHS for publications based on the *Simple AEHS*, as shown in the lecture. The AEHS uses red and green labels to illustrate whether a publication is relevant. Besides the functionality of the Simple AEHS, the following features shall be implemented:

- ▶ Categories are – like publications – hierarchically structured based on prerequisites (*preq*).
- ▶ Publications are structured by categories. The categories shall be labeled like the publications. A category shall be labeled green if it contains at least one relevant publication.
- ▶ We consider that a user *understood* a publication after reading.
- ▶ If a user read all publications from a category and all sub-categories are marked as understood, then the category shall be marked as understood.
- ▶ Understood publications and categories shall not be marked as relevant any longer.

Exercise:

1. Create an appropriate AEHS by specifying the Document Space (DOCS), User Model (UM), Observations (OBS) and the Adaption Component (AC).

Exercise 2: User Modeling with Stereotypes

A news portal is used to deliver personalized news and advertisements.
The user modeling is performed by means of stereotypes.

1. Characterize the following stereotypes:
   - ▶ *"Businessman"*
   - ▶ *"Sportsman"*
   - ▶ *"Culture interested"*

2. In certain situations, certain stereotypes are activated. Define practical Triggers for the following situations:
   - ▶ Situation A: User reads an article from the category "politics".
   - ▶ Situation B: User subscribes to an RSS feed from the category "sports".
   - ▶ Situation C: User comments on an article in the feuilleton

3. Define how triggers and stereotypes should be used to build up the user profile. How does a user profile look like after the occurrence of situation C and B.