

# Towards the Creation of Customized Teaching Scenarios to Support Classroom Interaction

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## Motivation

Activate students in traditional or live-stream lectures using their personal mobile devices

- existing systems often have predefined functional scopes due to single underlying didactic concept(s)
- *lecturer has to adjust to the currently used system* [1]
- Goal: The system can adapt its functionality to the lecturer

## The stARS approach [2]

scenario-tailored **A**udience **R**esponse **S**ystem

- create customized workflows of interactive activities [3]
- support different kind of interaction:
  - lecturer – student
  - student – lecturer
  - student – student



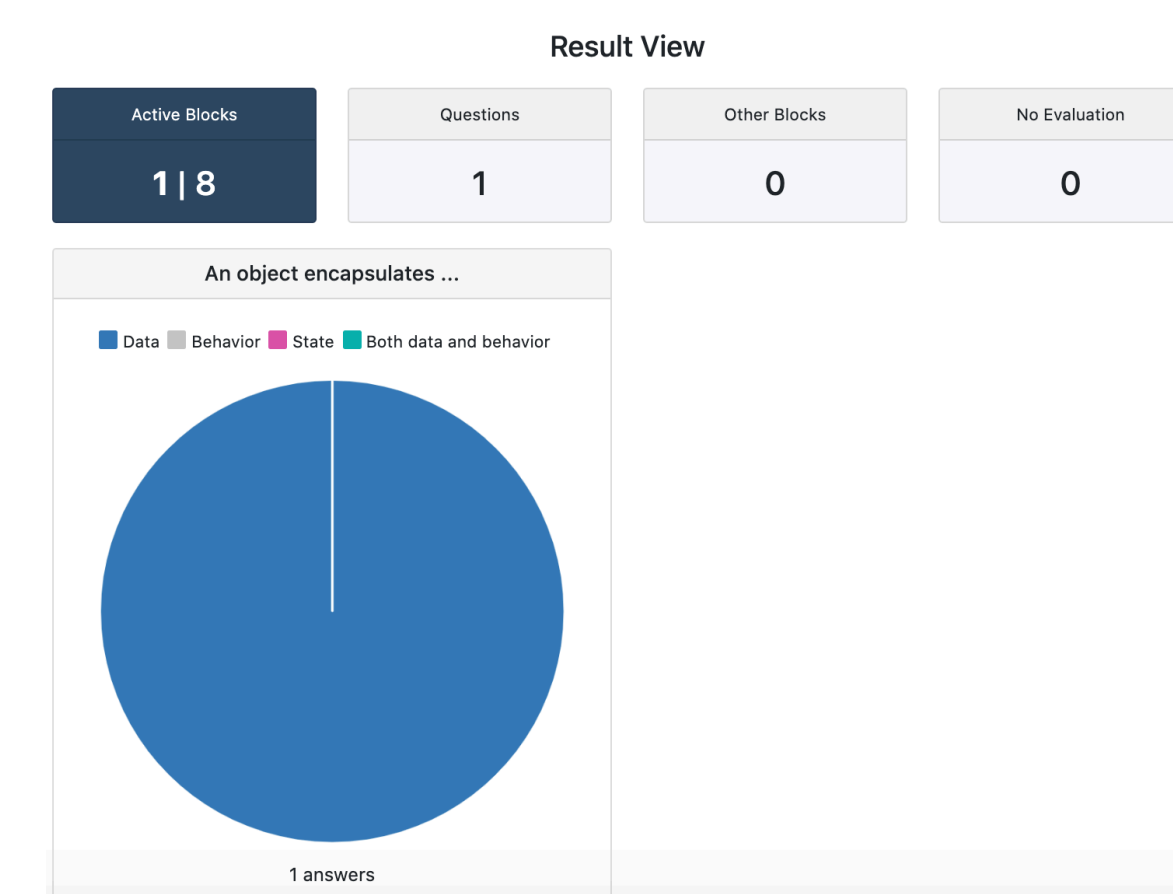
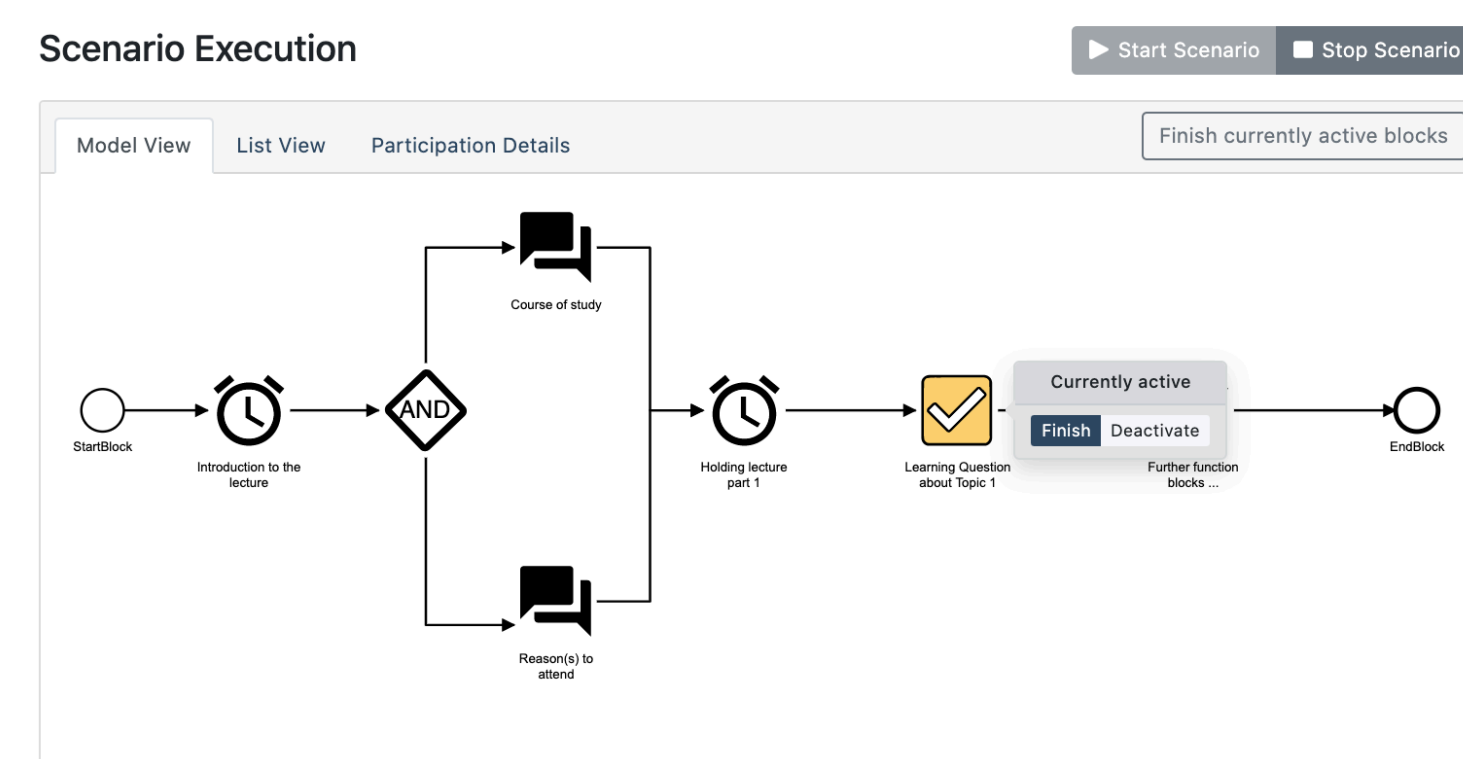
<https://stars-project.com/>

## Create custom scenarios

## The lecturer view

Manage workflow

Evaluate results



## The student view

Interact using currently active function blocks with their individual settings

answer feedback is shown

## Ongoing and next steps

Graphical editor is still the main critical user interface:

- Support the starting phase (e.g., show an overlay),
- Modeling complex scenarios (e.g., import, export)

The next steps will be as follows:

- Evaluate stARS in *traditional / live-stream* scenarios
- Extend by advanced functionalities → *CSEE&T Poster*

[1] D. Schön. *Customizable Teaching on Mobile Devices in Higher Education*. Universität Mannheim, PhD thesis, 2016.

[2] T. Kubica, I. Shmelkin, R. Peine, L. Roszko, and A. Schill. *stARS: Proposing an Adaptable Collaborative Learning Environment to support Communication in the Classroom*. CSEDU'20, SCITEPRESS, 2020.

[3] T. Kubica, I. Shmelkin, and A. Schill. *Towards a Development Methodology for Adaptable Collaborative Audience Response Systems*. ITHET'19, IEEE, 2019.