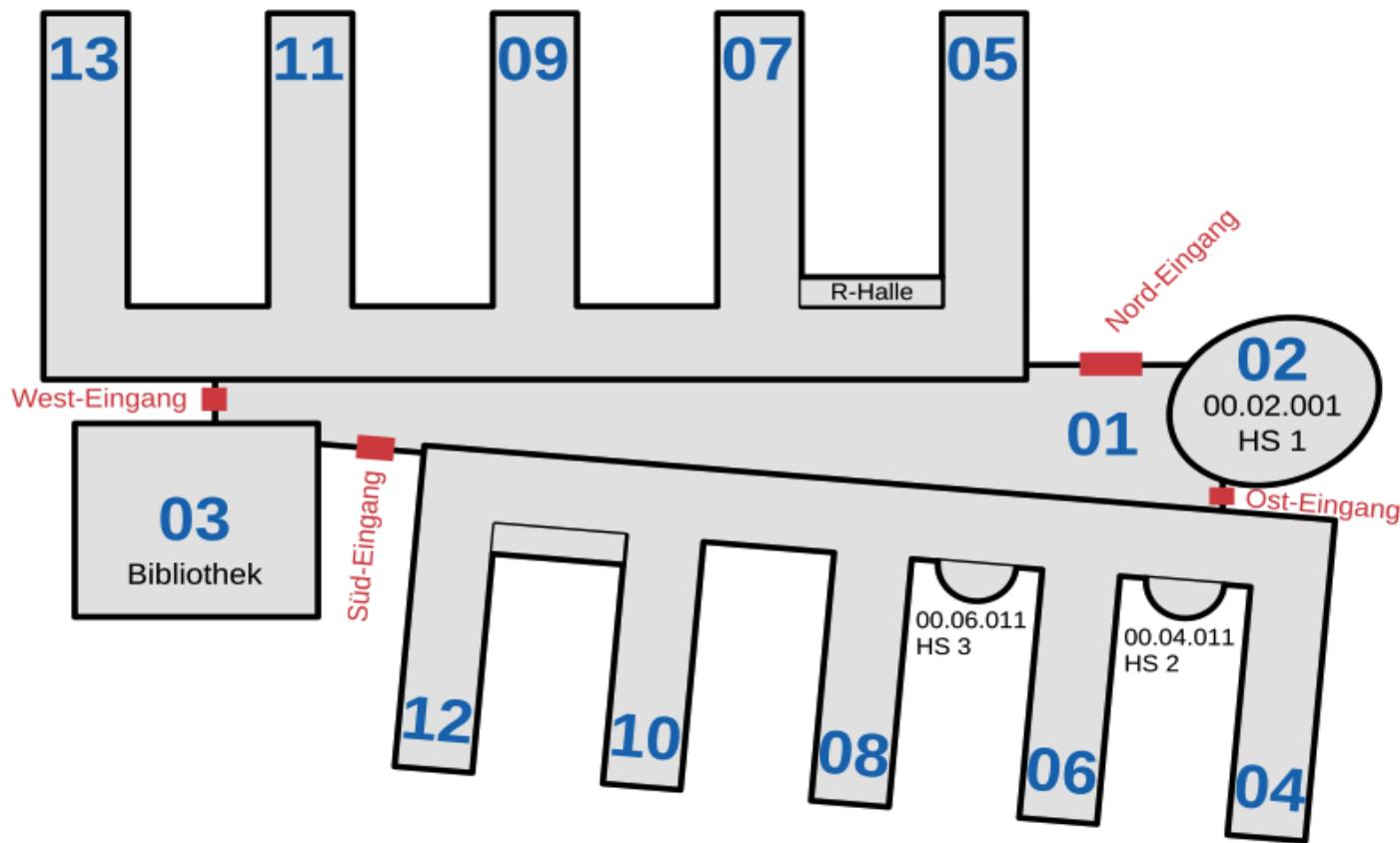




# ASSIGNMENT 1: MODEL

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# DESCRIPTION OF SCENARIO



# GROUPS OF NODES

## Students:

- + Can attend multiple lectures a day
- + Interact with other students
- + Study individually or in groups
- + Non-lecture periods are usually spent inside the main hall

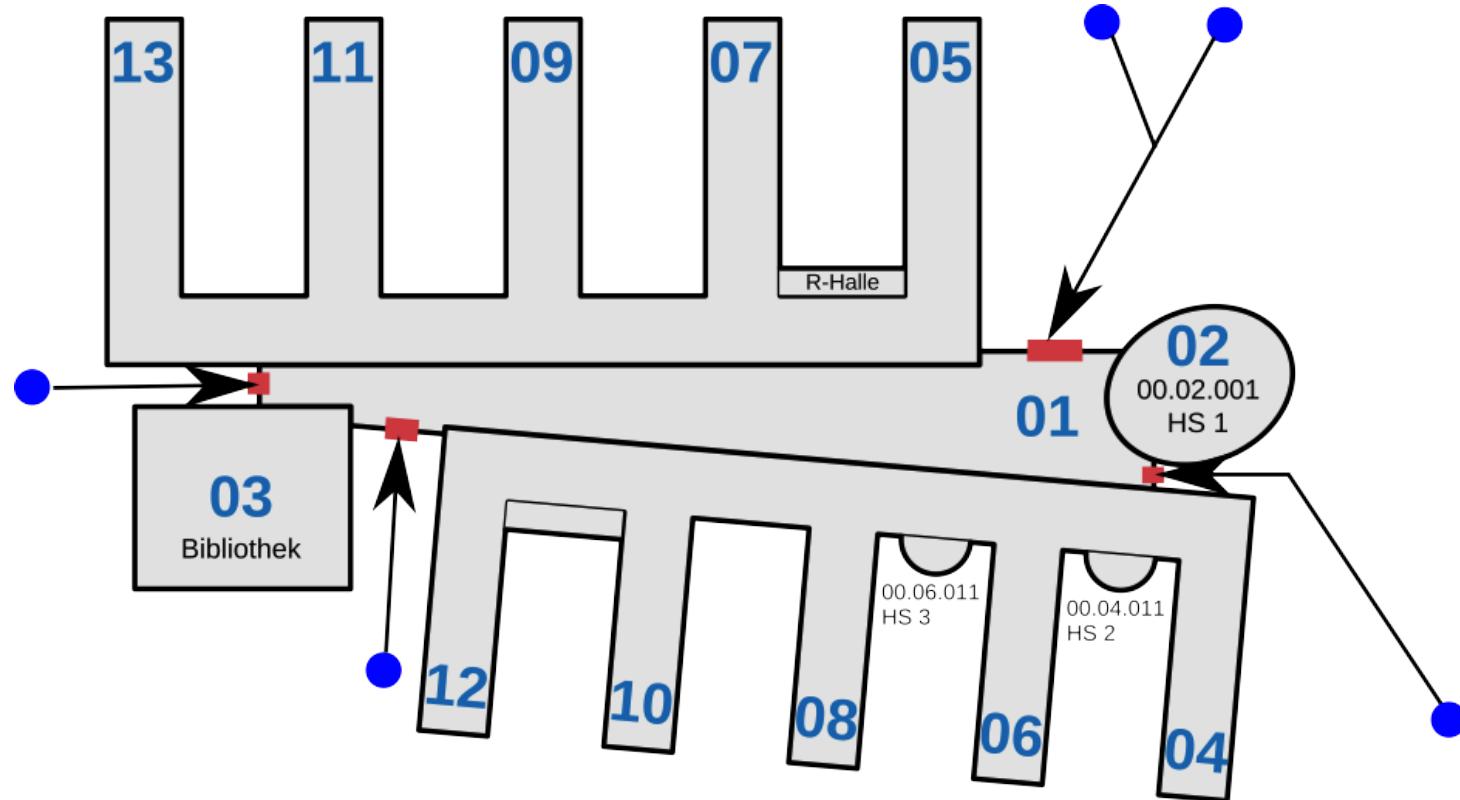
## Professors:

- + Can give 1-2 lectures a day
- + Have less interaction with other nodes
- + Non-lecture periods are usually spent in an office

# NODE STRATEGY

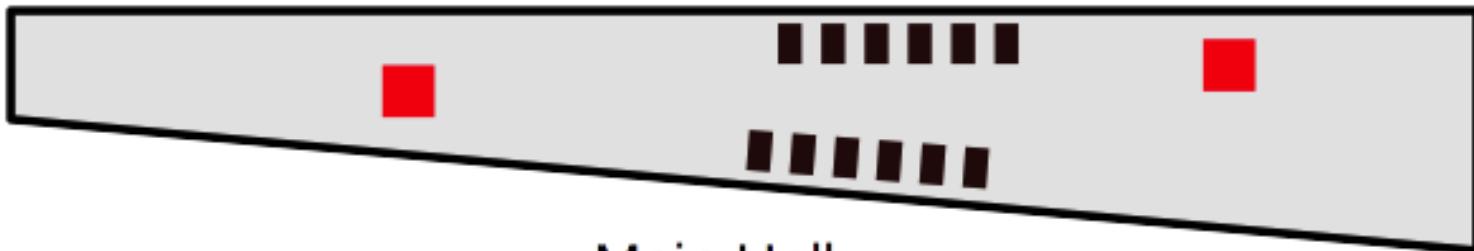
- + In order to model different behaviors, nodes need to enter a specific state for each activity
- + States:
  - + Enter building
  - + Exit building
  - + Attend a lecture
  - + Study
  - + Interact with other students
  - + Eat
  - + ...

# ENTER AND EXIT



- + Nodes follow a path before entering and exiting the building

# MAIN HALL

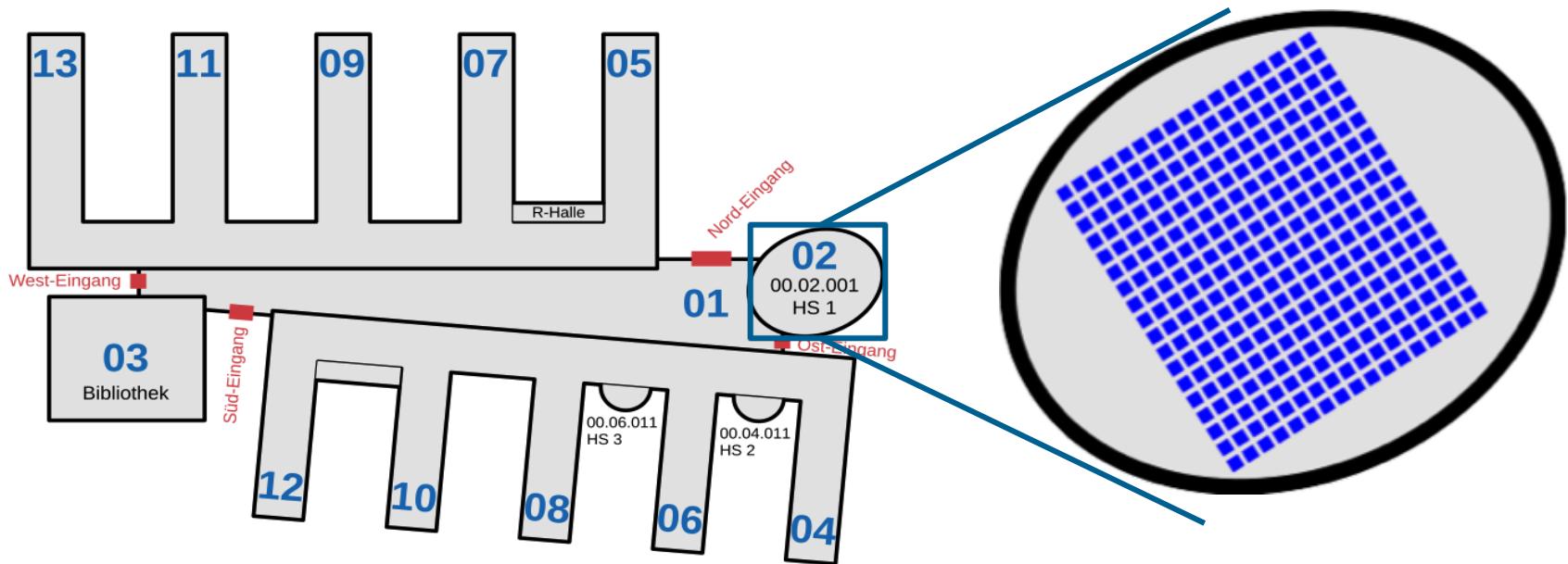


Main Hall

- Stairs
- Table

- + Nodes can move freely inside the main hall
- + When not attending a lecture students behave randomly, based on dynamic probabilities
- + Nodes may aggregate and form groups (of limited size) through spontaneous decisions of the nodes

# LECTURES



- + In structures outside the main hall, nodes follow a path to a waypoint
- + Waypoints are associated to an activity

# LECTURE SLOTS

- + Classrooms have a fixed capacity for nodes
- + Each classroom randomly generates time slots (lectures) in which nodes can occupy them
- + When nodes decide to go into the lecture-state, they pick a lecture from the list of available ones and move to the associated room

# FURTHER DETAILS

- + Library
- + Rechnerhalle
- + Study rooms
- + Restrooms
- + Cafeteria

