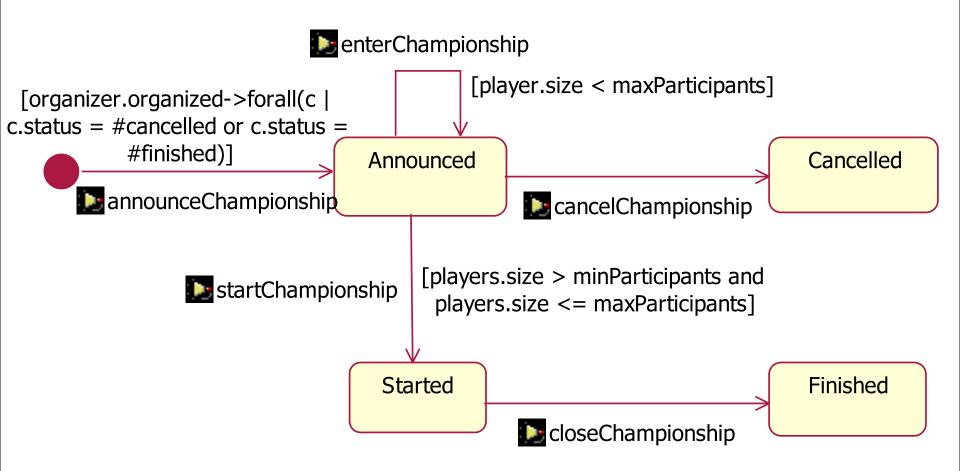
## Statecharts of Entity Classes

## Statechart of Championship (with events of ChampManager)



## States

- Concrete state:
  - Combination of possible values of attributes
  - Can be infinite
- Abstract states: (like in statecharts)
  - Predicates over concrete states
  - One abstract state many concrete states
  - Hierarchical states:
    - Frequent in embedded apps (e.g. control of car brake)
    - Rare in business entities
- Implementation (of abstract state)
  - 1 query method
    - (no sidé effect, with bool return value)
  - Special attribute (of enumeration type)

## Transitions

- Guards
  - OCL expressions (see next lecture on OCL)
- Events / Effects
  - Business methods of control classes
- Note:
  - Execution of a business method may trigger state changes in multiple statecharts!!!