Querying Temperature Sensor Actor Data



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Overview



Design overview

Complexities

- Temperature sensors may come & go
- Multiple queries may be initiated
- Sensors may not respond in time

Adding code to Floor actor?

Representing query as a new actor

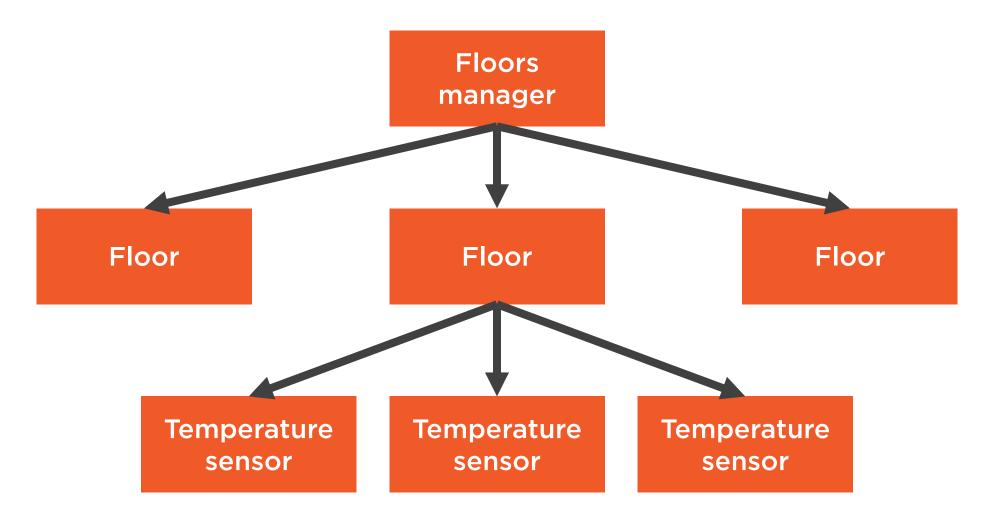
Add new message classes

Add sensor query result classes

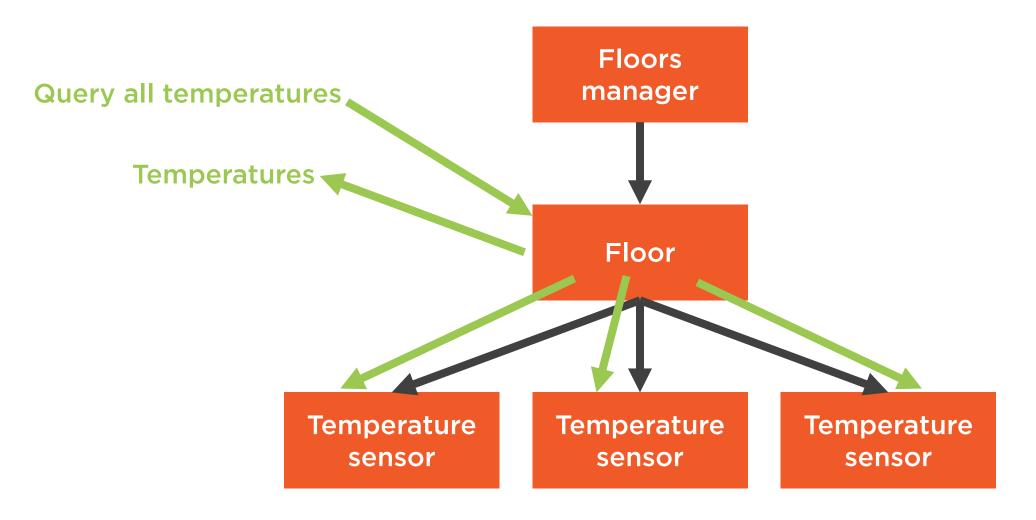
Add new FloorQuery class

Working query functionality

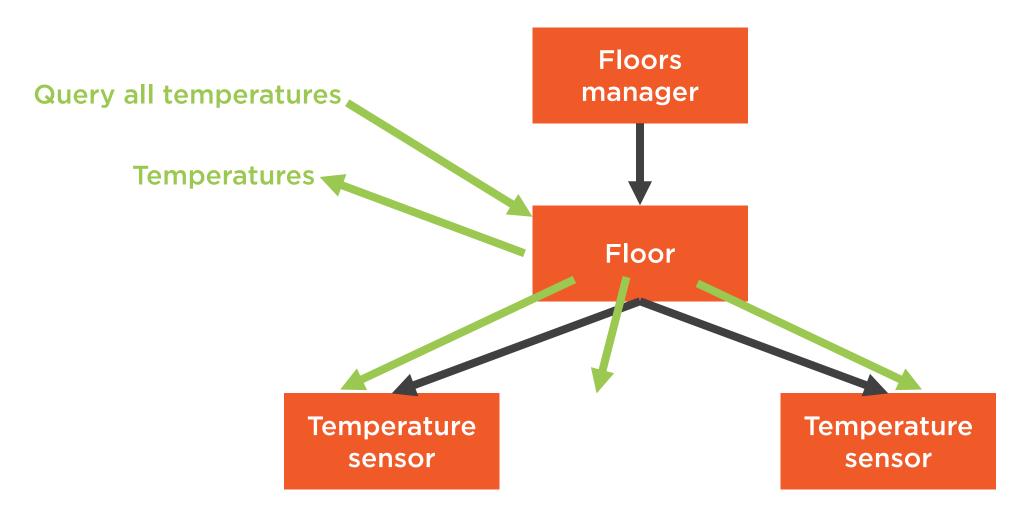




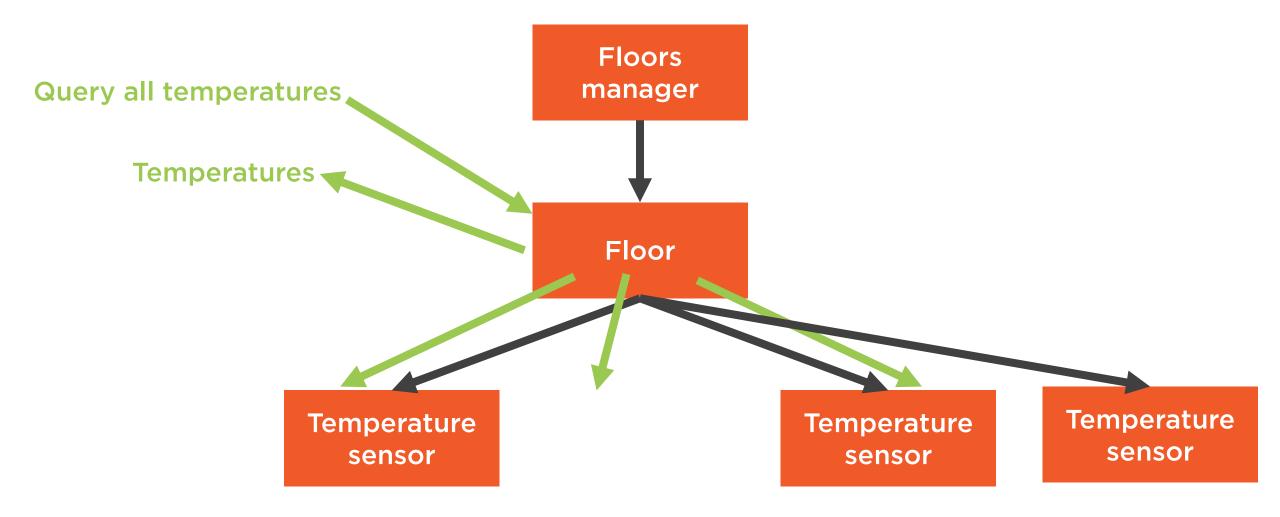




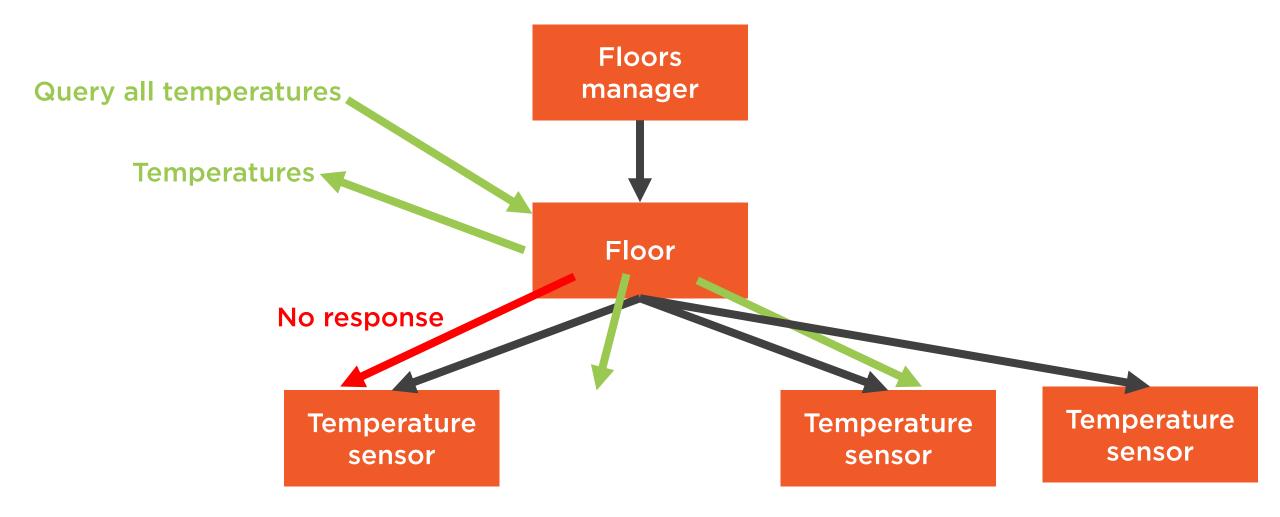




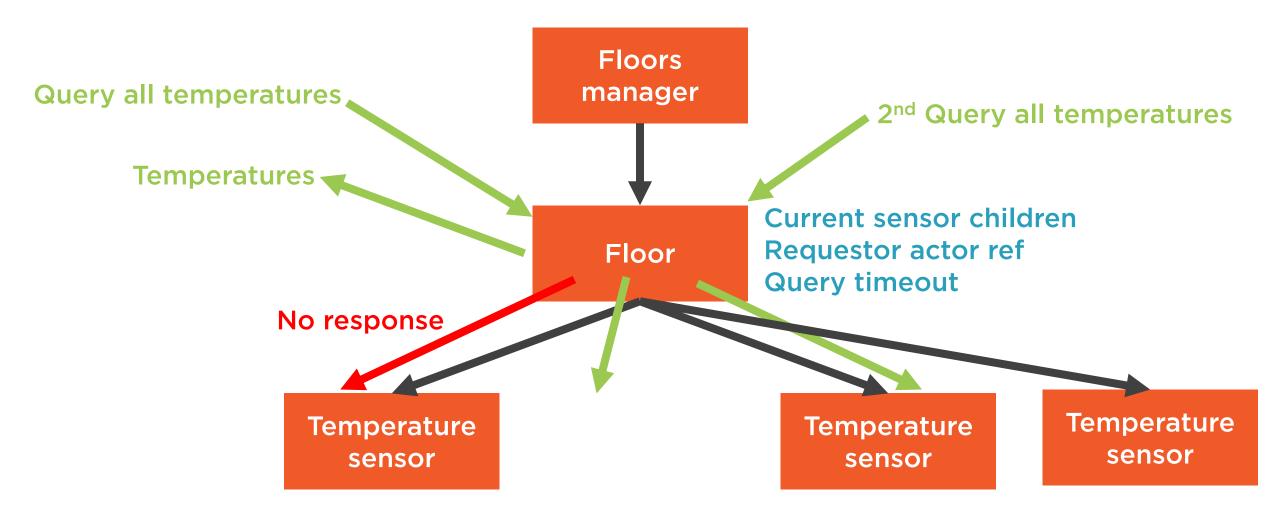




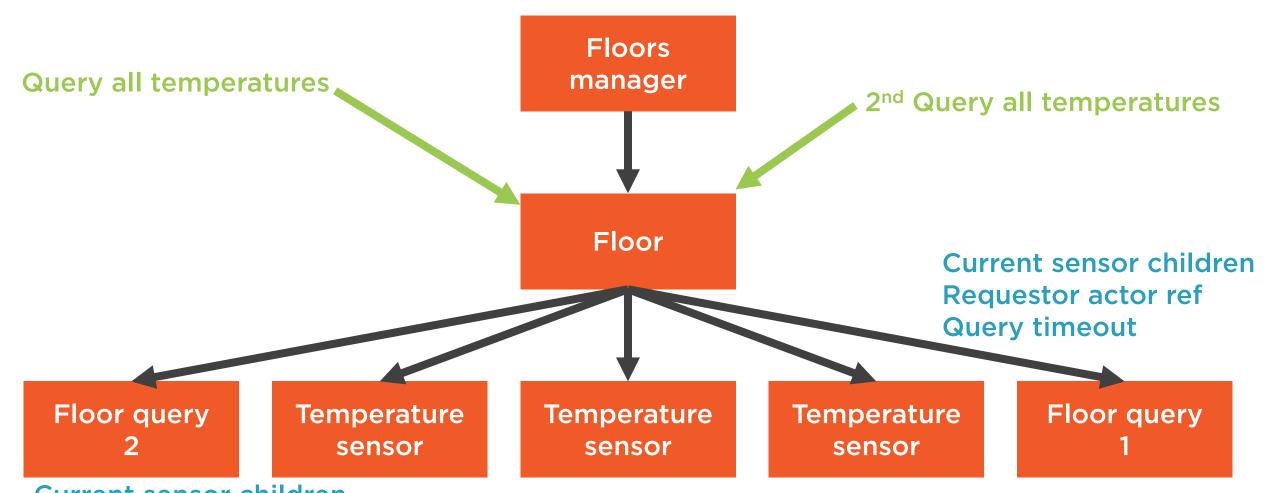












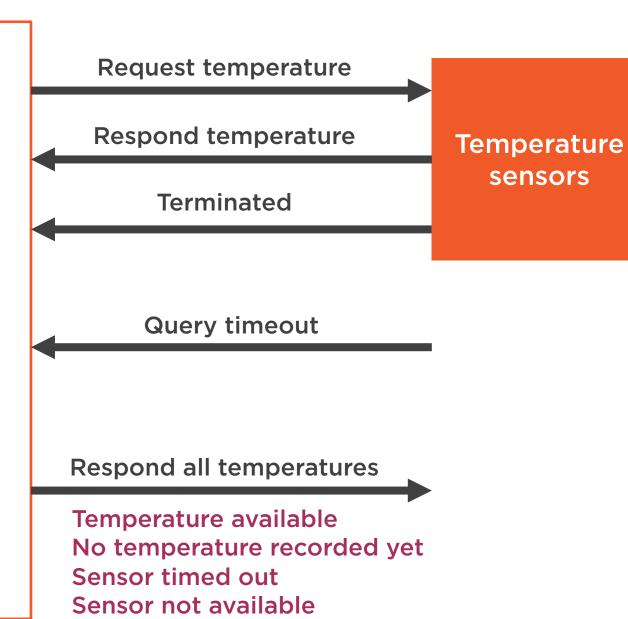
Current sensor children Requestor actor ref Query timeout



FloorQuery

Query timeout
Actor-SensorId map
Request ID
Requester actor ref

Start timeout timer
Watch children
Capture child
temperatures
Respond all temps



Summary



Design overview

Complexities

- Temperature sensors may come & go
- Multiple queries may be initiated
- Sensors may not respond in time

Adding code to Floor actor is complex

Represent query as a new actor

Added RespondAllTemperatures message

Added ITemperatureQueryReading classes

Added new FloorQuery class

- ScheduleTellOnceCancelable()



Next:

Implementing a Simple Console Actor System Host

