

Querying Temperature Sensor Actor Data



Jason Roberts

.NET MVP

@robertsjason dontcodetired.com



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

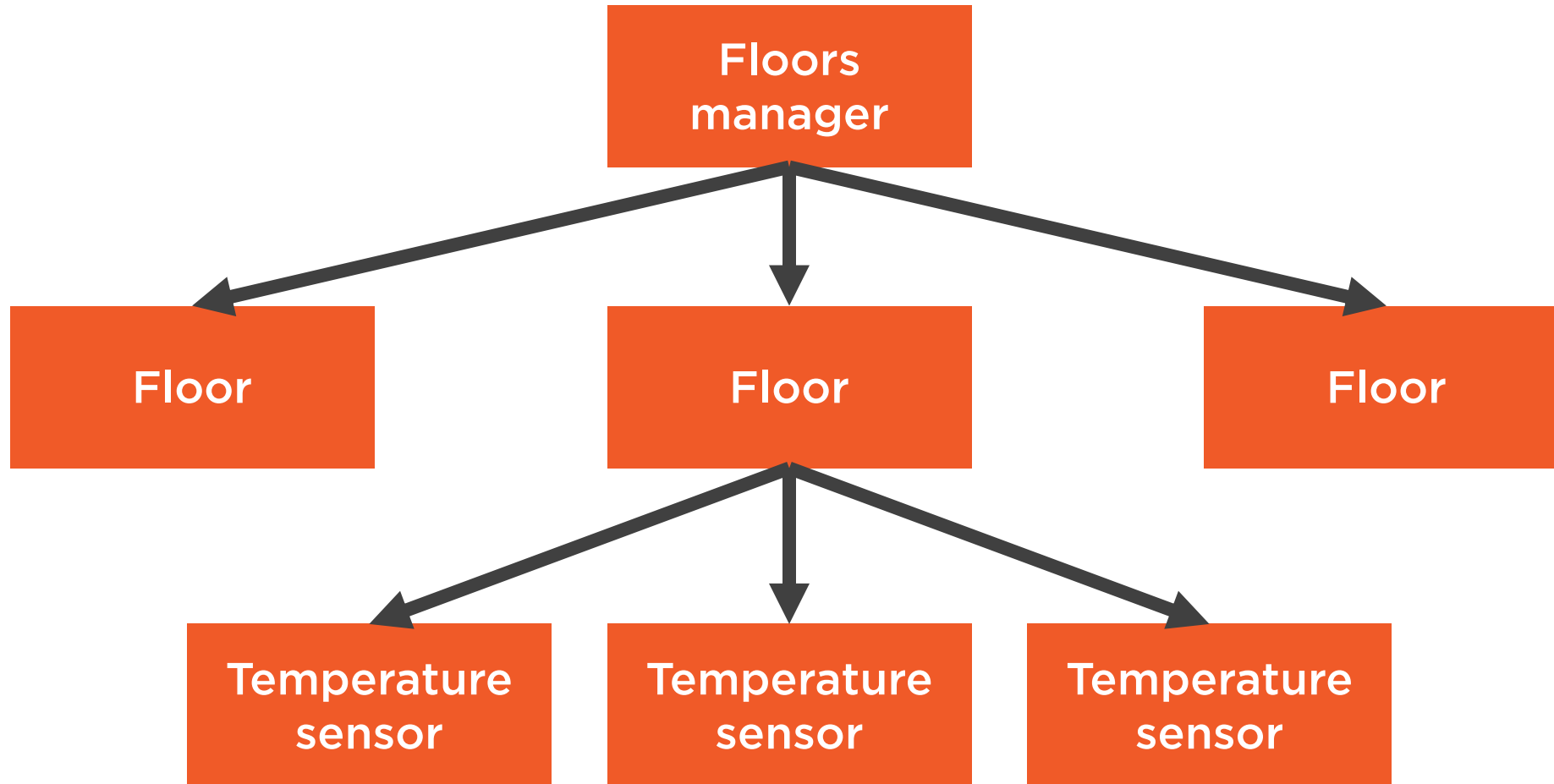
Add sensor query result classes

Add new FloorQuery class

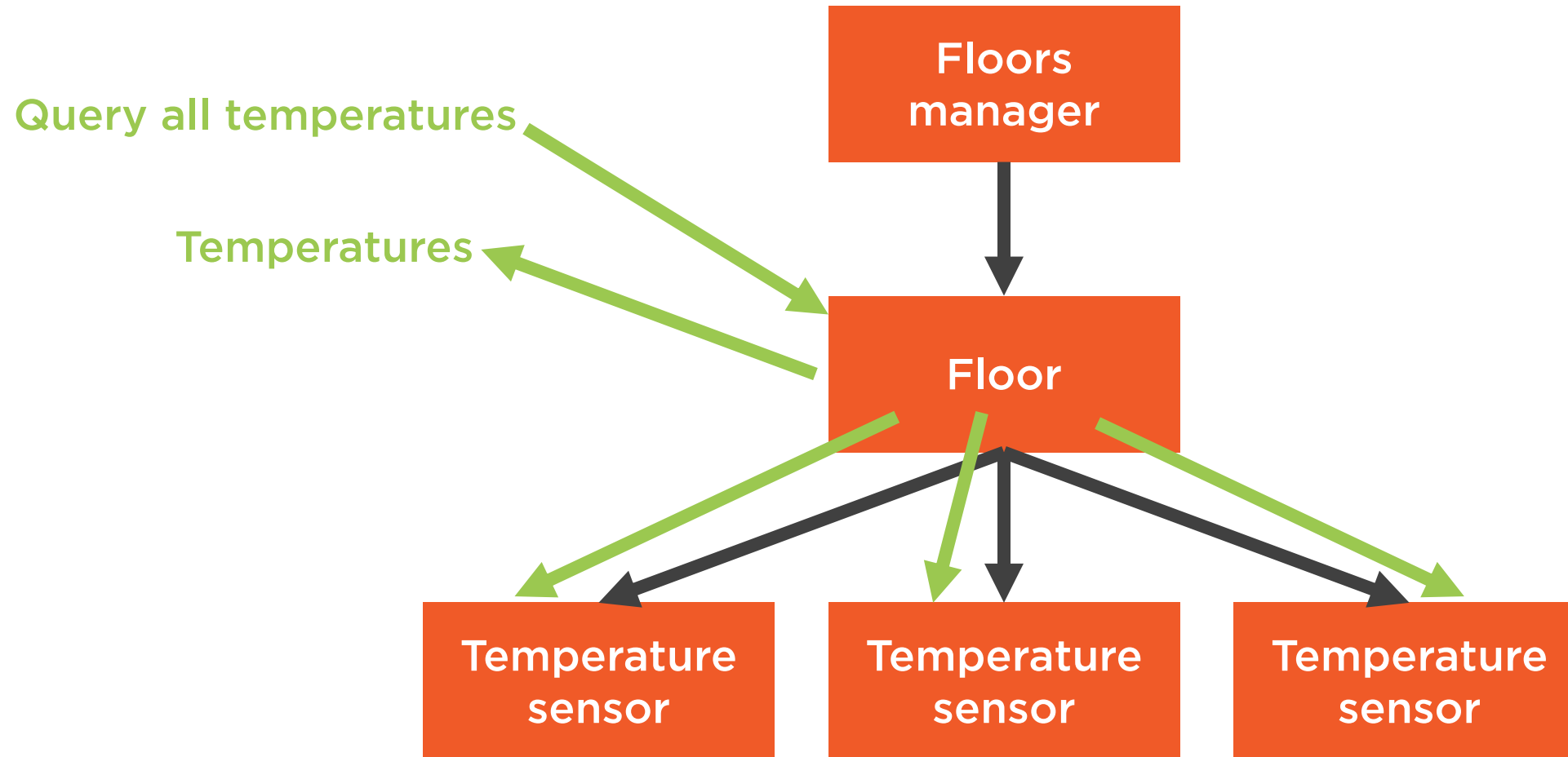
Working query functionality



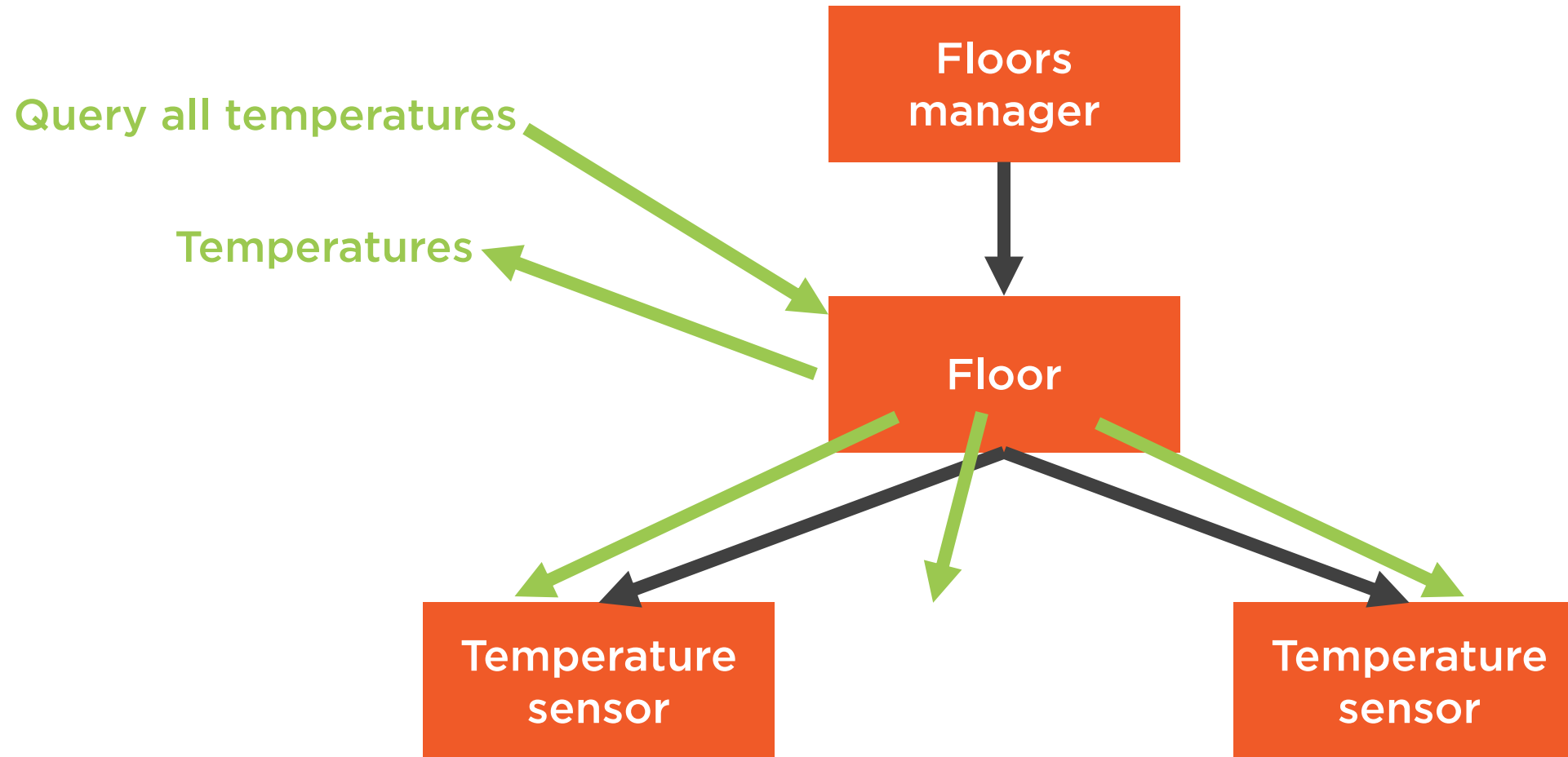
Supervision Hierarchy



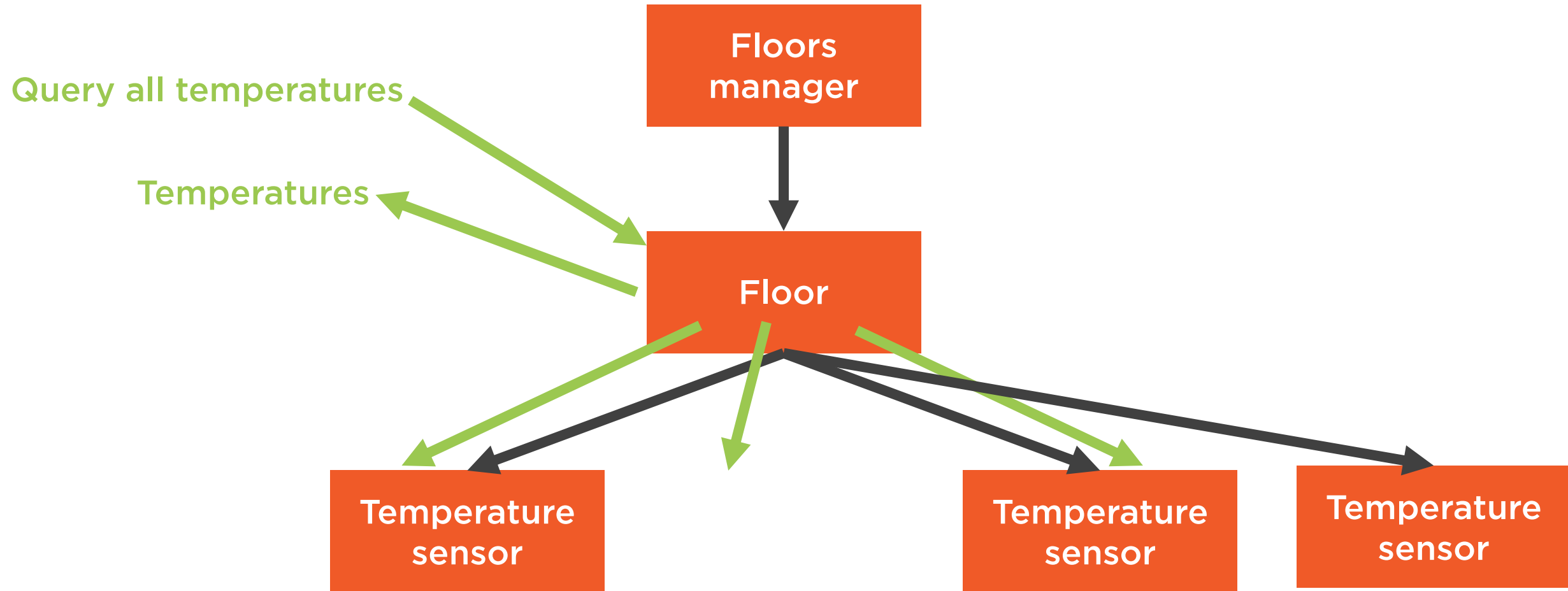
Supervision Hierarchy



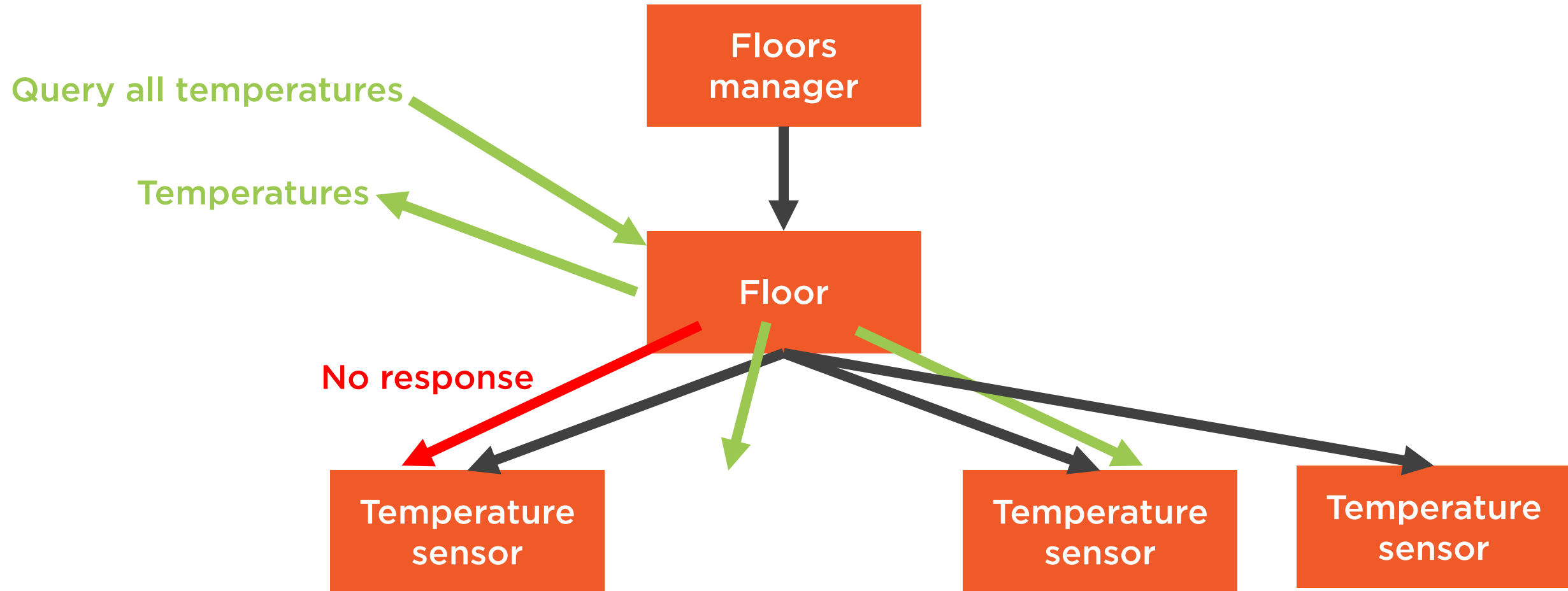
Supervision Hierarchy



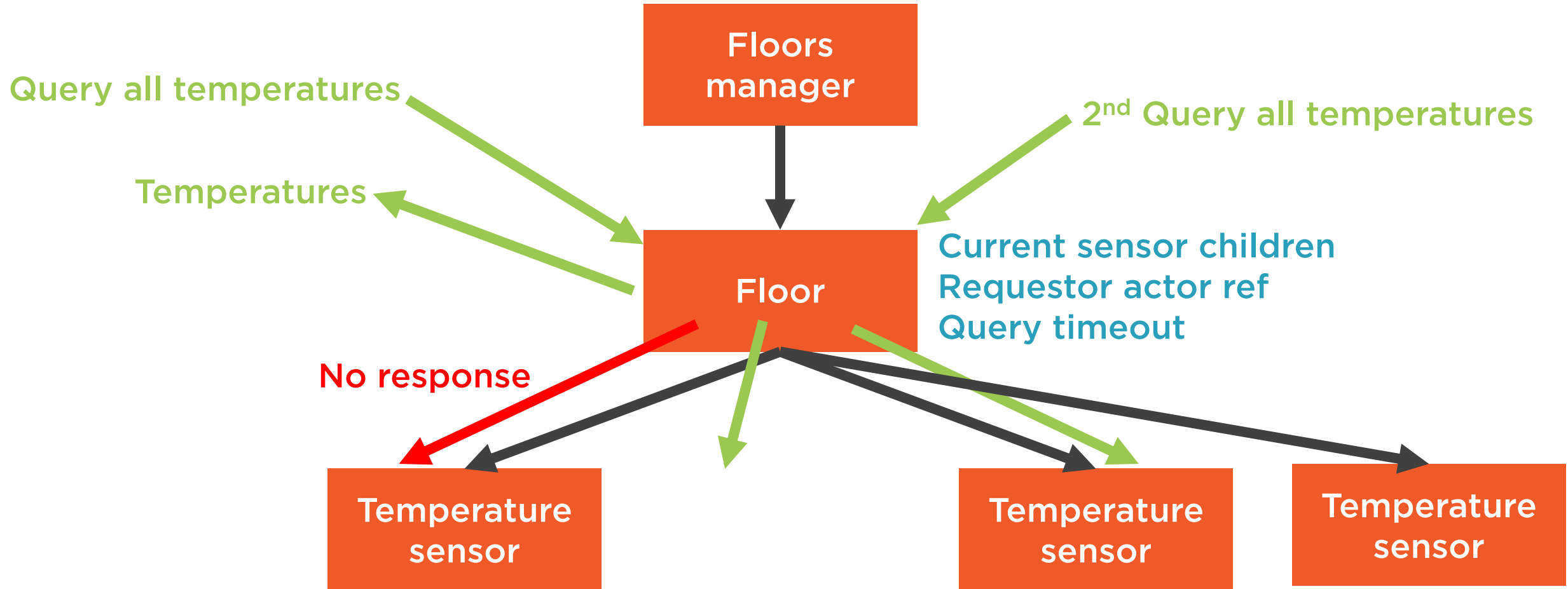
Supervision Hierarchy



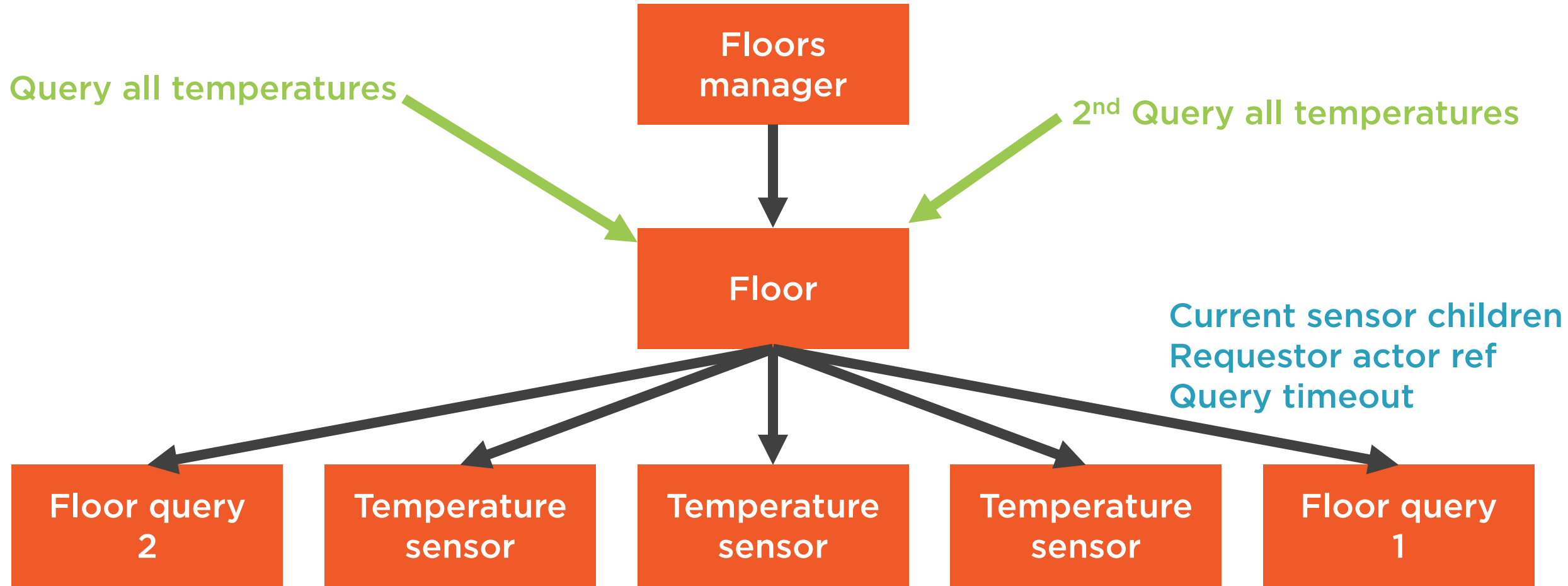
Supervision Hierarchy



Supervision Hierarchy



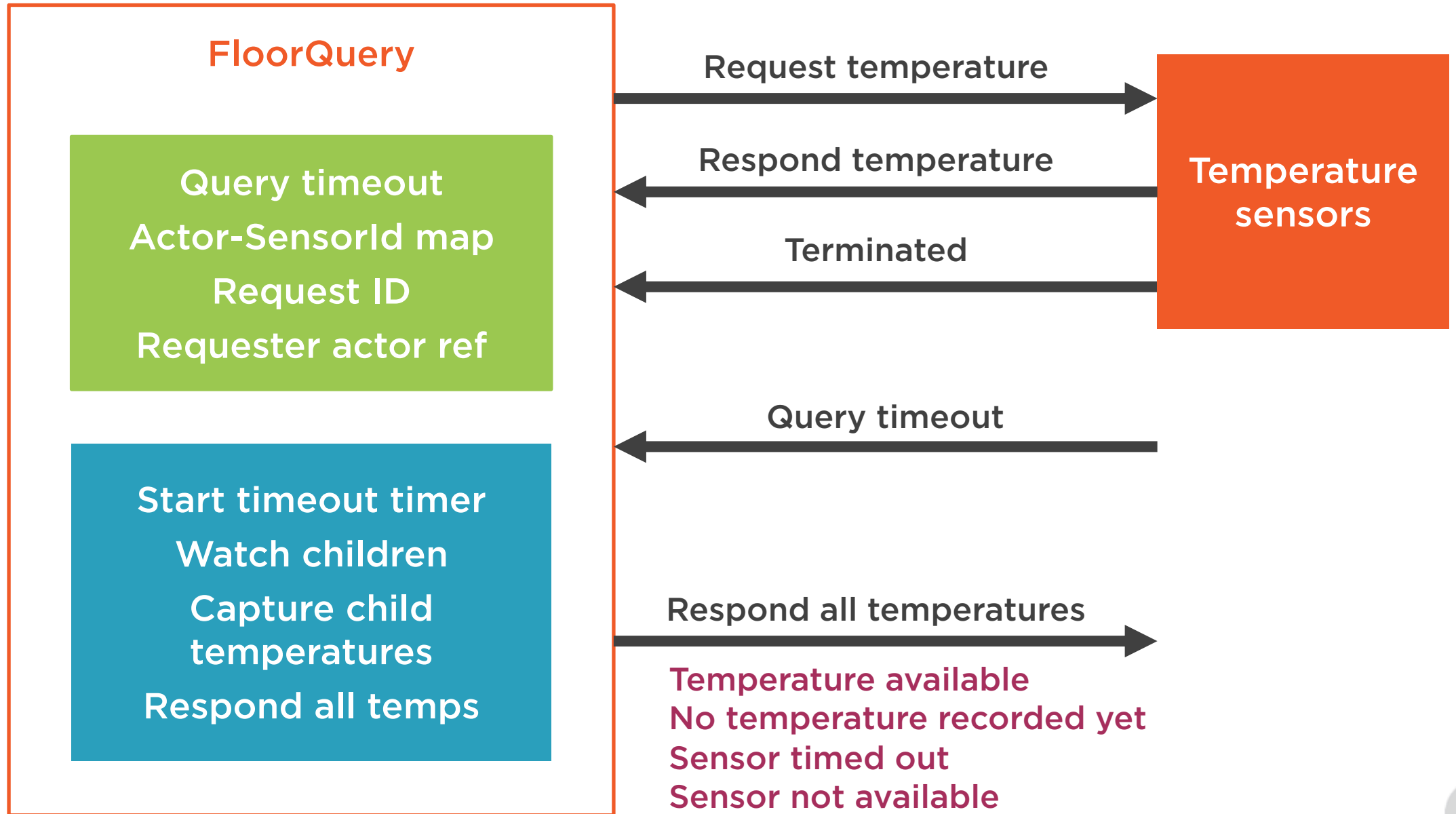
Supervision Hierarchy



Current sensor children
Requestor actor ref
Query timeout

Current sensor children
Requestor actor ref
Query timeout





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

