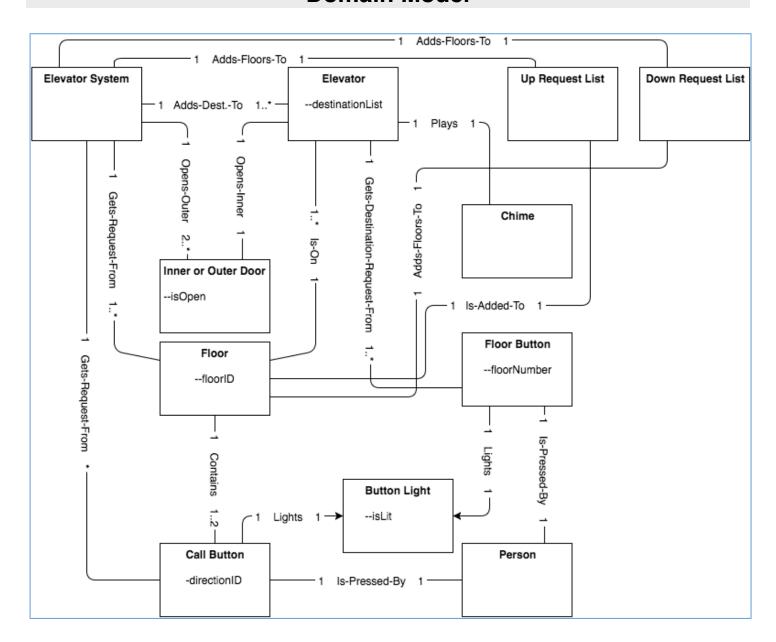
# **Domain Model**



# **Contracts**

### Operation: callElevator()

- Pre: A person is on a Floor
- Post:
  - An association was formed between a Floor f and the Up Request List ul or the Down Request List dl.
  - A Call Button cb's Button Light b's isLit attribute was set to True

### Operation: getNextFloor()

- Pre: N/A
- Post:
  - A destination was added to an Elevator e[i]'s destinationList
  - An association was destroyed between a Floor f and the Up Request List ul or the Down Request List dl.

## Operation: arrivedAtFloor()

- Pre: An Elevator e[i] has a floor in its destinationList
- Post:
  - o A Floor was removed from an Elevator e[i]'s destinationList
  - A Call Button cb's Button Light bl's isLit attribute was set to False
  - o A Floor Button fb's Button Light bl's isLit attribute was set to False
  - The Elevator System set the Outer Door od[j][k]'s isOpen attribute to True
  - o An Elevator e[i] set the Inner Door id's isOpen attribute to True

#### Operation: selectFloor()

- Pre: A person has entered an elevator
- Post:
  - o A Floor Button fb's Button Light bl's isLit attribute was set to True
  - A floor was added to an Elevator e[i]'s destinationList

#### Operation: addFloor()

- Pre: N/A
- Post:
  - A floor was added to an Elevator e[i]'s destinationList
  - An association was destroyed between a Floor f and the Up Request List ul or the Down Request List dl.