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Tea-room covid-19: Requirement Analysis

Although the requirements describe pretty well the composition of the tearoom, here we re-organize a bit the concepts to have a clearer view.

# Setting

## **teaRoom**: rectangular room composed of:

### **N teaTable**: tables placed inside the tearoom, where the admitted **Client** can drink his tea.

### **serviceArea**, composed of:

#### **serviceDesk**: where the entity barman prepares the tea after receiving a request by the waiter;

#### **home**: where the waiter can rest if it has no tasks to do.

### **hall**: area that acts as intermediate between the clients that want to enter the tearoom and the area where they can be served. When a **Client** arrives, he has to wait here before entering the teaRoom (client behaviour explained in point 2). It is equipped with:

#### **a presenceDetector,** which can detect the presence of a person or other entity;

#### **a smartbell,** which measures the temperature of the Client that wants to enter the tearoom and send a request message to the waiter, assigning a unique **clientIdentifier** to the Client.

#### an **entranceDoor**, through which the client will be admitted inside the tearoom;

#### an **exitDoor**, through which the client can leave the tearoom.

## A **tearoom is considered safe** if there are no people inside with a temperature greater or equal than 37.5˚ and if there are clean tea-tables posed at a proper distance.

# Client

## **notifies his interest in entering the tearoom**: once in the **hall**, before entering the tearoom, the Client ***will send a notification*** to the **smartbell**, whose behavior has been described in point [[1.A.iii.2](#_a_smartbell,_which)].

# Waiter

## **notifies the smartbell**

# Entites as Actors

# Exchange of Messages

# Heading 1

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