

**Appendix C: Visualisations**



Figure C.1: Sensor Visualization Development (SDV)



Figure C.2: RFID Sensor Visualization Development (RFID SDV)

**Sensor Visualization Development (SDV)**

The SDV developed aims to showcase the intensity of the ambient sensors as well as the subject and environment status. With the status of all the ambient sensors in the same window, it enables the caregiver to conveniently track sensor changes in the cognitive environment. In addition, the RFID SDV is a user interface where respective utensil images are shown according to the assigned tag ID.



Figure C.3: Floor plan of AmI Lab and associated sensors configuration

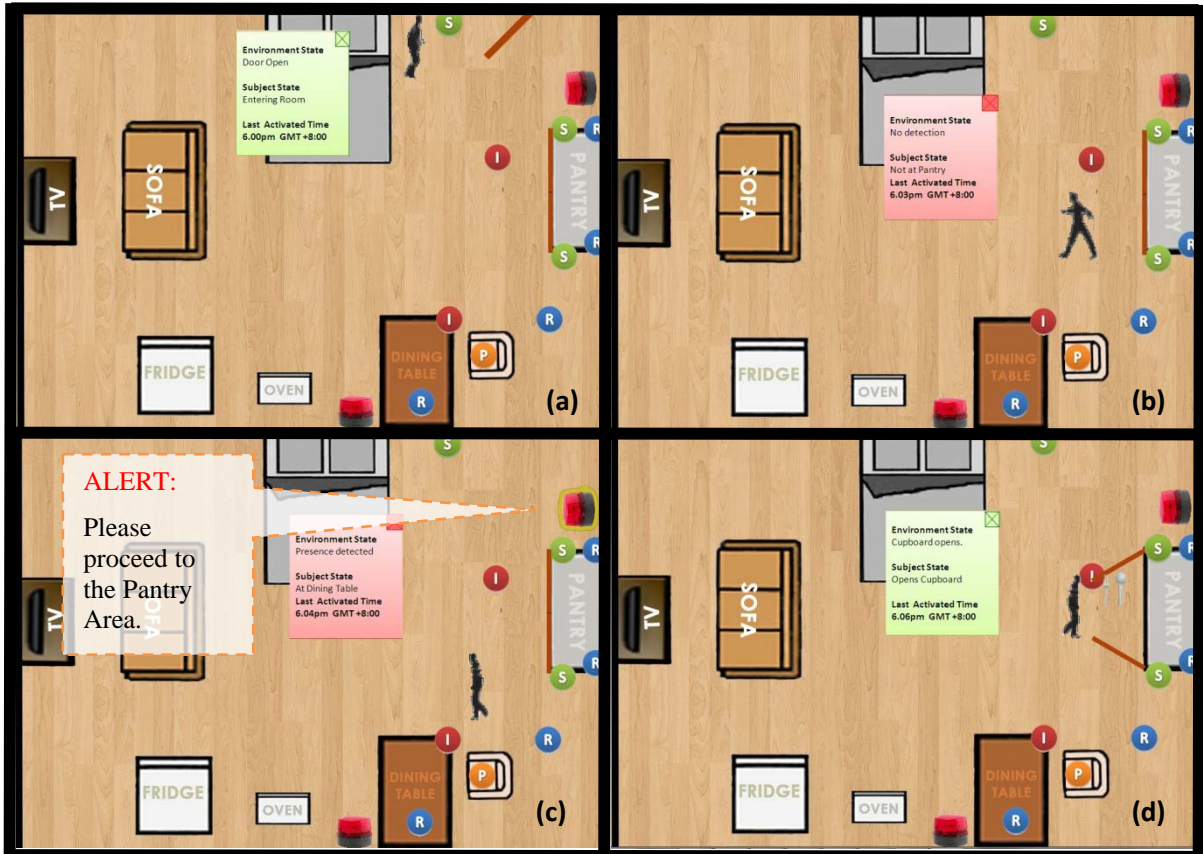


Figure C.4: (a) Offline GUI: Opening the door; (b) Offline GUI-Erroneous Activity Sequence: Did not proceed to Pantry Area; (c) Offline GUI-Erroneous with reminder: Please proceed to the Pantry Area. (d) Offline GUI-Correct: Taking out Utensils

**Graphic User Interface (GUI)**

The **first offline GUI** illustrates the correct activity sequence which showcases elderly activities that are in accordance to the plan definition. While the **second offline GUI** illustrates the erroneous activity sequences which showcases the elderly erroneous activities that does not correspond to the plan. Hence, stimulated reminders are also implemented to remind the elderly according to the predefined plans to correct his/her actions. Similarly, an **online GUI** has also been developed to display the elderly patient’s current activity by collecting and interpreting real live sensor readings and data. With the use of animations, the caregiver will be able to monitor and observe the elderly activities remotely.