0517 TEAMB

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1

Robotics

1 Robotics

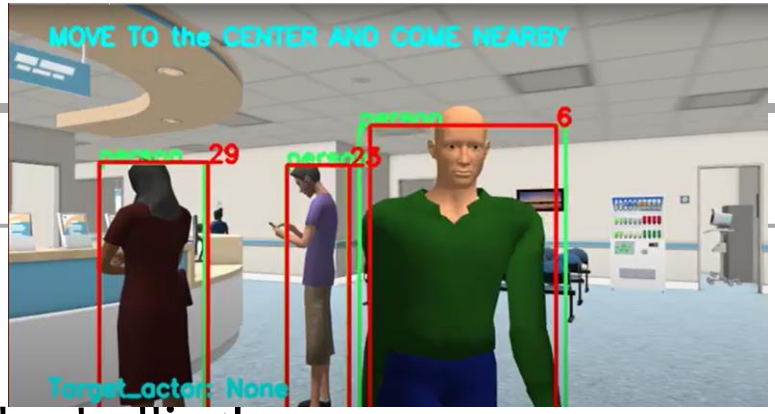
- Week12 진행상황

Improving Sort tracking service -> Higher performance

Emergency detection check

Planning final demo scenarios

1 Robotics



- Sort tracking Improvement

Clarify the sort tracking algorithm. . .

Main purpose : Interaction with human while strolling!

Make final improvements to use in final presentations.

Keep track of Human by “index”(sort tracking).

Identification : Identify nearest person as a “USER”

Identification process when we lost “USER”.

Stop when Human 〈–〉 Robot distance more than 5m.

Emergency detection test

Test to ensure we detect several flipping poses (emergency detections)

1 Robotics

- Planning Final Demo video scenarios

Idle mode in indoor nursing home map.

Petrol(Move around) the nursing home and detect if there's an emergency situations. + APP SERVICE

Strolling service in outdoor map.

Show videos of Tracking camera while walking, emergency call when USER is out of sight

+ Overall App functions

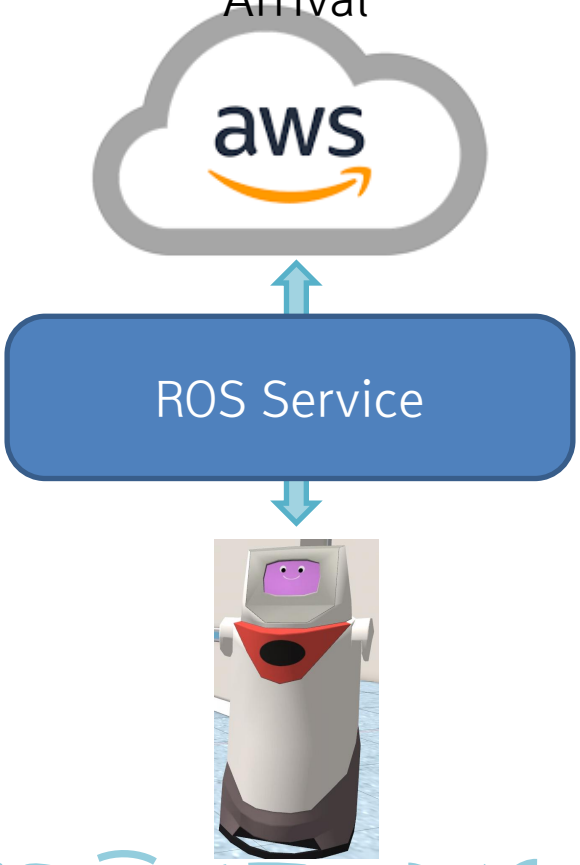
2

Backends

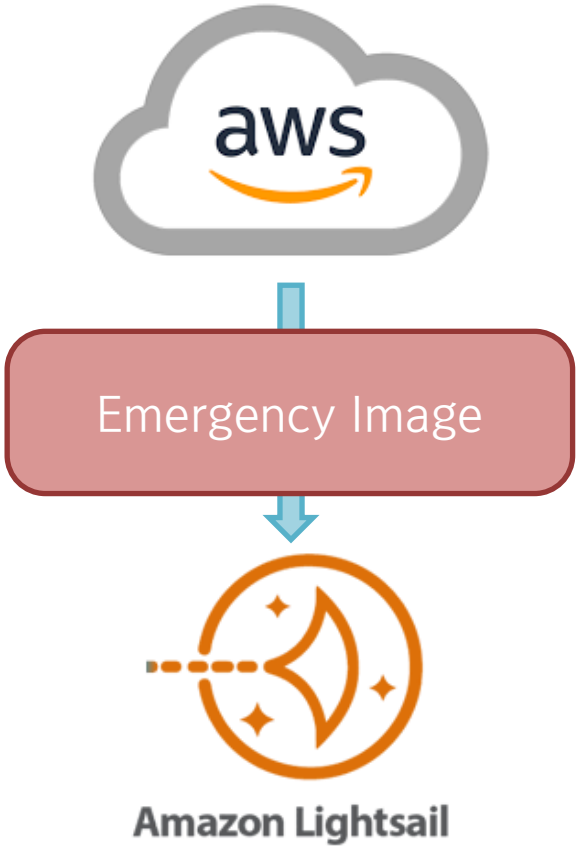
2 Back-End

- Progress

Send Goal and Receive Arrival

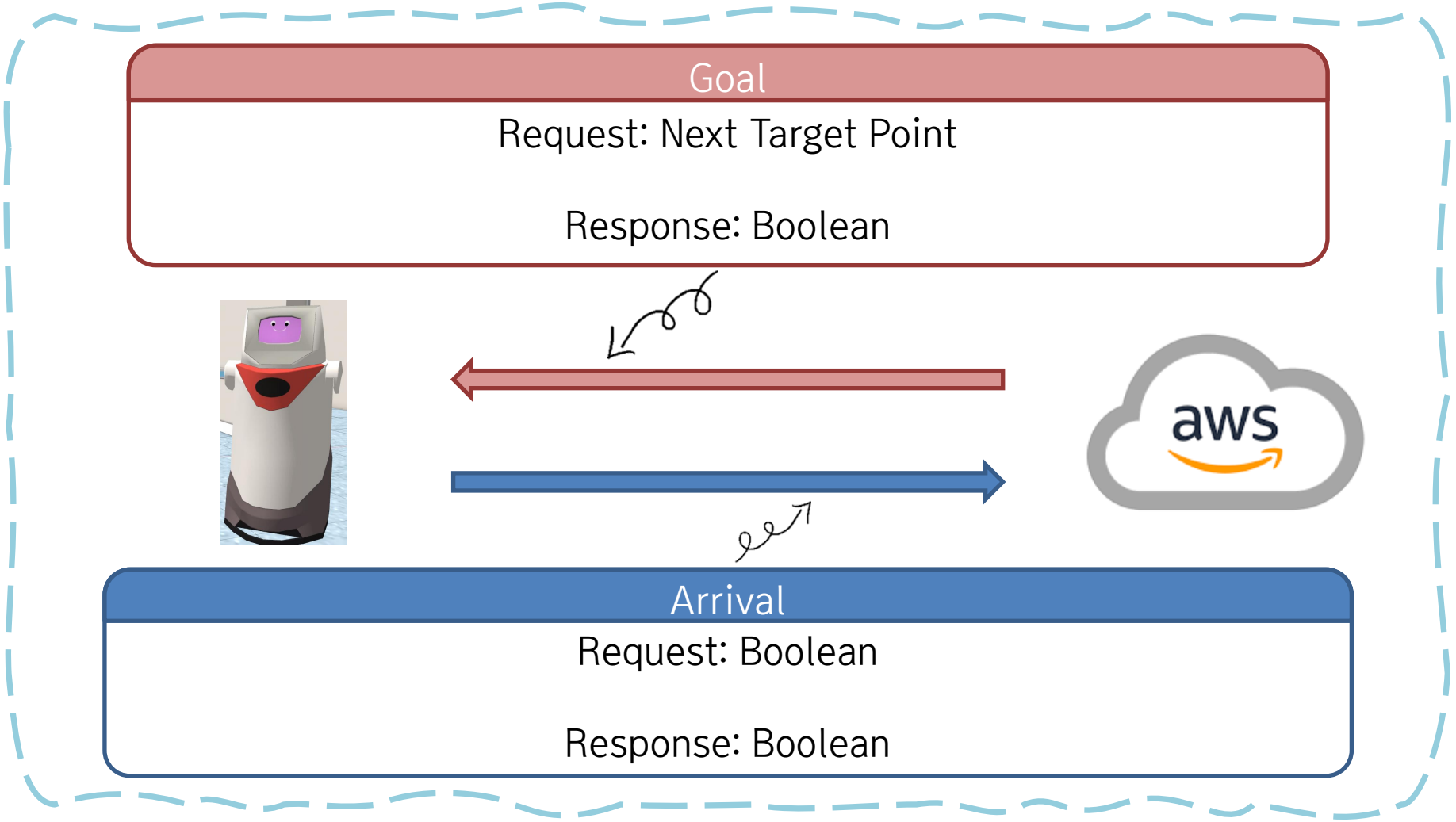


Database for Emergency



2 Back-End

- Send Goal and Receive Arrival



2 Back-End

- Send Goal and Receive Arrival: Demo

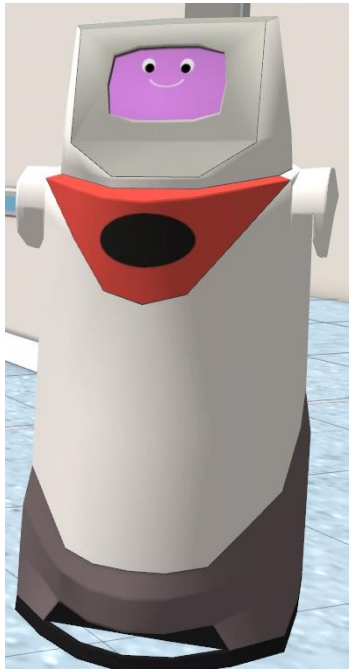
2 Back-End

- Sebot and Application

Sebot

USER ID

Application



2 Back-End

- Emergency Database

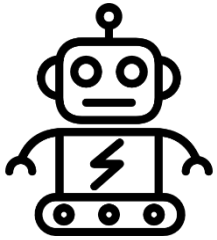
USER ID

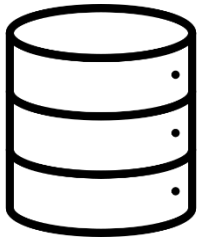
Database
Image Name
User ID

Admin Page
User Info
Emergency State
Robot's Location

2 Back-End

- Future Plans






Integration

- Test Whole Service
- Connect With Admin App

3

Front-End

3 Front-End

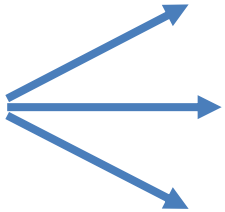
- Websocket context

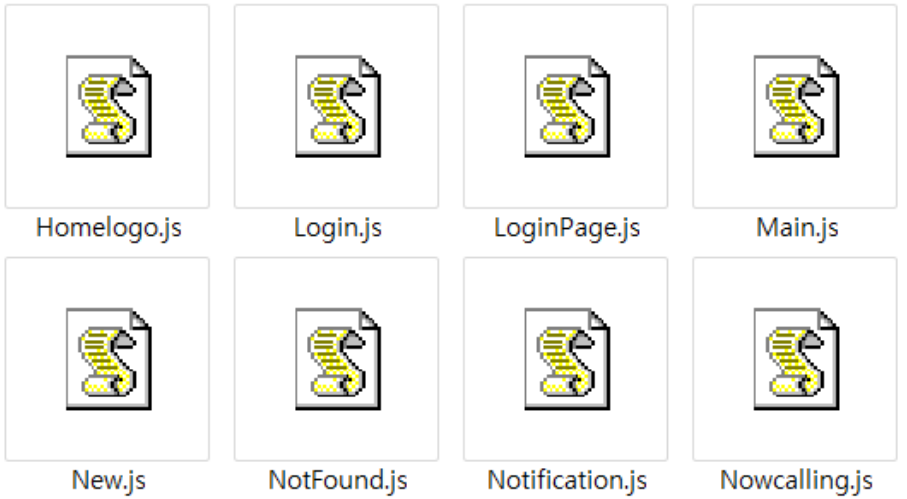
```
export const socket = socketIo(String('http://127.0.0.1:5000'),
export const SocketContext = createContext(socket);

socket.on("connect", () => {
  console.log("socket server connected.");
});

socket.on("disconnect", () => {
  console.log("socket server disconnected.");
});
```

websocket





Use single websocket channel via context

3 Front-End

- Call robot

3 Front-End

- Call robot(2)

3 Front-End

- Notification about Emergency

image

socket

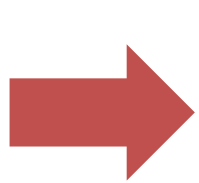
signal

notification

3 Front-End

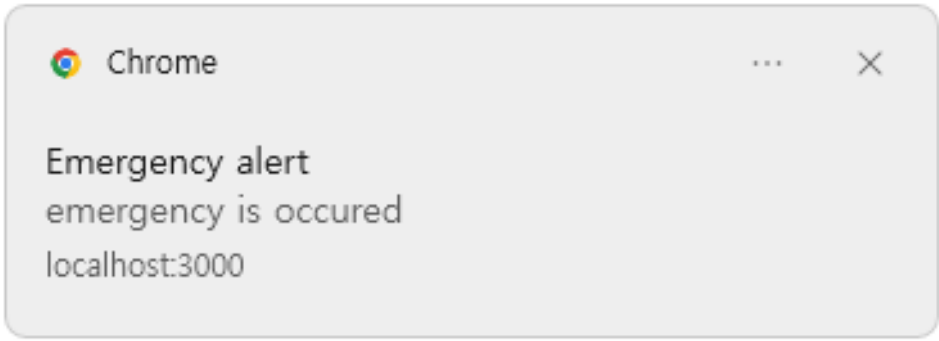
- Notification about Emergency(2)

notification



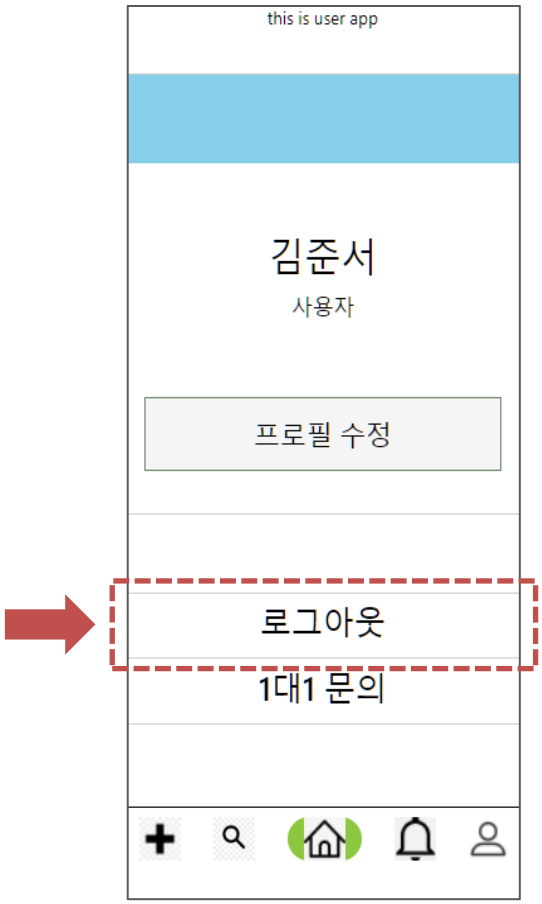
browser

Alarm in Browser



3 Front-End

- Button for Logout



로그아웃 버튼 기능 작동

flask

session

Session.Clear

null

3 Front-End

- Future task

user interface during walking assistance

finish walking assistance

THANK YOU