

Final Project Proposal

Team 4

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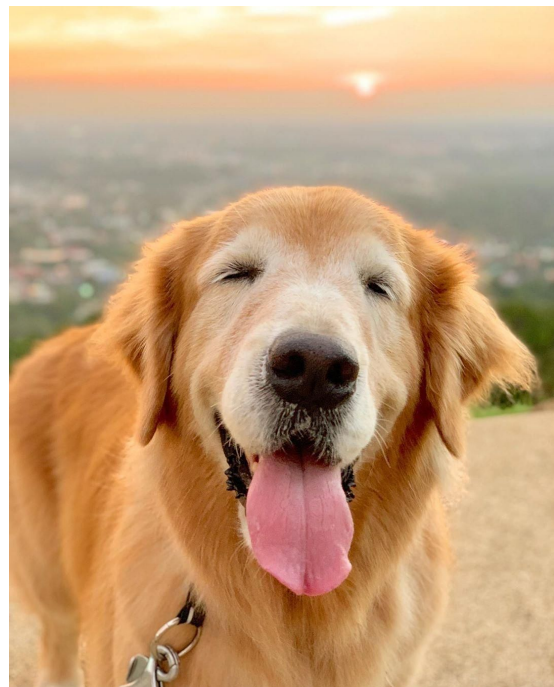
b04502051 陳邦元

What

We'll build an application on pioneer to achieve the followings:

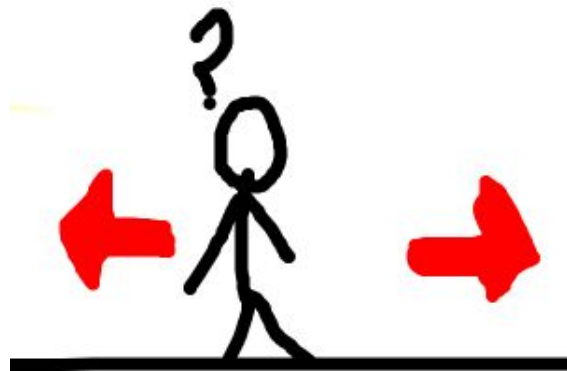
1. Help people to **find the target location** they want to go
2. Guide people through the whole CS-building.
3. **Proactively** help people when they are in needs.

We call it **CSIE-Retriver**



Why

Sometimes, some people want to visit CS-building but they don't know **where bathroom or elevator is**. Additionally, lots of CS-students are **too busy studying to help those people out**. Therefore, with the aid of **CSIE-Retriver**, newcomers can **immediately** find the target and furthermore, or even have a thorough understanding of CS-building.



How

- Hardware
 - Pioneer
 - Hokuyo URG-04LX-UG01
 - Realsense D435i
- Software
 - ARIA Library
 - ROS
 - ROSARIA
 - p2os
 - slam-gmapping
 - ...
- Simulation
 - Gazebo



When (Schedule)

11/18 ~ 11/24	setup environment for our pioneer (1)
11/25 ~ 12/1	setup environment for our pioneer (2)
12/2 ~ 12/8	survey speech recognition and natural language understandings
12/9 ~ 12/15	porting SR and NLP services on our pioneer
12/16 ~ 12/22	plan on how to guide people through CS-building
12/23 ~ 12/29	refine our works
12/30 ~ 1/5	add additional computer vision features (1)
1/6 ~ 1/12	add additional computer vision features (2)

Who

施承志 : study topics mentioned, write codes

夏瑜 : study topics mentioned, write codes

陳邦元 : study topics mentioned, write codes