

# SMART INDIA HACKATHON

# PROBLEM STATEMENT

**AI based interactive robot for elderly care.**

- To help the elderly can enjoy a greater deal of independence by helping with day to day tasks.

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- To facilitate better health and quality of life during old-age.

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- To enable regular interactions with peers to drive away solitude.

# SOLUTION

- An **interactive companion** for the well-being of elders
- Bot featuring **A.I. automated navigation**
- 7 inch capacitive **touch screen** , featuring state of the art microprocessor
- Implementing **IOT** based home automation
- Houses a kettle, a medicine cabinet and a detachable tray for carrying condiments
- can be **controlled** via one's **mobile phone**

# TECHNOLOGY STACK

**01**

Hector SLAM  
Navigation stack

**02**

Google Assistant  
Custom API

**03**

Dialogue  
flow

**04**

Device  
connection via  
WSN

**05**

Home Security  
using SSD

# Use Cases

- companion for elderly person
- lifestyle management system – elder's daily routine
- highly interactive entertainment system
- It houses a medicine cabinet facilitating easy access
- Thermal sensors
- RGBD – fall detection > automatically contacts the registered emergency services.

# WOW FACTOR

- Economically feasible
- Highly customizable in terms of lifecycle management
- Durable, mobile and lightweight
- Integrated with Google Assistant Custom API for voice controlled automation
- Inbuilt protocol to contact emergency services

# TEAM MEMBERS

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