**Title**

**Intro (Large text + more old person)**

Problems of elderly

* elderly are less healthy
* difficulty walking
* remembering to take medication
* lonely

Why is this problem important

* falling or forgetting to take meds a single time can pose immense health threat
* 129 suicides in singapore, an all time high <https://www.straitstimes.com/singapore/number-of-suicides-among-seniors-hits-record-high>

**History (Med text + 1 bot)**

Background info

Focus on use bc appeal is well understood

current solutions insufficient bc cannot move and do things for elderly

**Proposition (large + 3 small icons)**

What are the things you want to do + IMAGE. Why?

icon 1. X

icon 2. X

icon 3. X

What is the aim?

* a pet that is useful yet effective

What is good about this aim?

* Assist with small tasks to reduce dangers faced by the elderly, reducing accidents

Benefits of research

* taking care of pets benefits mental health <https://bmcpsychiatry.biomedcentral.com/articles/10.1186/s12888-018-1613-2>

**Research Method (single arrow) & Implementation (large image + small text)**

Different approaches

* home system. however, ended up choosing bot. Use affecive computing to assume role of pet. Goal of Alleviate loneliness.

How to implement

Images of equipment + list

* rpi
* arduino :
* speaker //ask for one : to send recorded audio messages
* bluetooth module : to send text message to phone
* sensor : to detect obstacles
* sonar sensor
* camera (for detection of you) : model: to take photos of
* microphone? (or future) //ask for one: to record X
* movement: uses the bou algo
* separate motors: can rotate on the spot

**Result (small text bubbles + 1 graph)**

Timeline of bot activity

* movement covers floor efficiently (more realistic, less botlike, no loops)

Measureable quantity (OpenCV)

* face recognized with % accuracy. gets better with more data.

**Conclusion (small text)**

Feasible. Inexpensive. Market in affective computing.

* additional: heart rate
* sleep tracking
* more affective computing (like a pet). survey to measure acceptability

Additional features include tracking individual health, such as sleep quality and heart rate. These require hardware to be worn, and are more invasive as a result. Surveys should be done to better understand affective computing, and increase pet-like visual appeal.