

# Craft A buddy



Dementia is a condition where a person's **cognitive skills** decline, which plagues the **aged**. This results in **anxiety and emotional turmoil** for both the persons afflicted and their families.

## Existing Gaps

Persons with dementia react to a wide variety of **different stimuli**. Methods to alleviate the condition will require **flexibility and personalisation**.

## Target Audience

Persons in the **middle stages** of dementia retain **moderate motor and cognitive functions**. They can be afforded the greatest improvement in their **quality of life**, without delving into specialised medical care.

Hence, we aim to create a proof of concept for a method that assists users in facing dementia with dignity.

'Feeding' emulates a companion needing care, facilitating **emotional bonding** between user and toy. This interactive activity gradually makes the toy indispensable to the user.

**Aromatherapy** is effective in **alleviating anxiety** faced by persons with dementia. Aromatic beads provide a **soothing aroma** that promotes **positive moods** in the user and stimulates the user's sense of smell, creating an effect similar to inducing a **meditative state**.

The **soft fur** provides a **comforting touch** to the user, reminiscent of toys they had in their childhood. Vibration motors provide **haptic feedback** to users' touch.



Users can choose and **personalise** their own toy, providing **visual familiarity** and comfort. This invokes a sense of **nostalgia and comfort**. LED lights have been incorporated to act as **visual stimuli**.

Upon patting the toy's favourite spots, the toy will express its "happiness" through **playing a familiar tune** and **haptic feedback**. This **integrated engagement** provides a 'physical response to the user's affections, encouraging **cognitive stimulation** to slow the **decline of their cognitive functions**.



The toy plays a familiar tune that **improves the user's mood**. It draws the user back into joyful **memories from his past**, allowing them to get in touch and remember themselves and their **surroundings**.

Moving Forward >>>

**Personalisation:** Fully customisable for the different needs and requirements of users.

**Health Maintenance and Monitoring:** Additional sensors for health monitoring and medical feedback to enhance the product's capabilities can be included. For example, with data on grip strength, doctors can better monitor the patient's physical health.

**GPS Tracking:** Caretakers can locate the user through a mobile application and assist the user home if they experience memory loss while they are out.