

# Integrated Design Project Ideas

Group No - 04 (Sec B)

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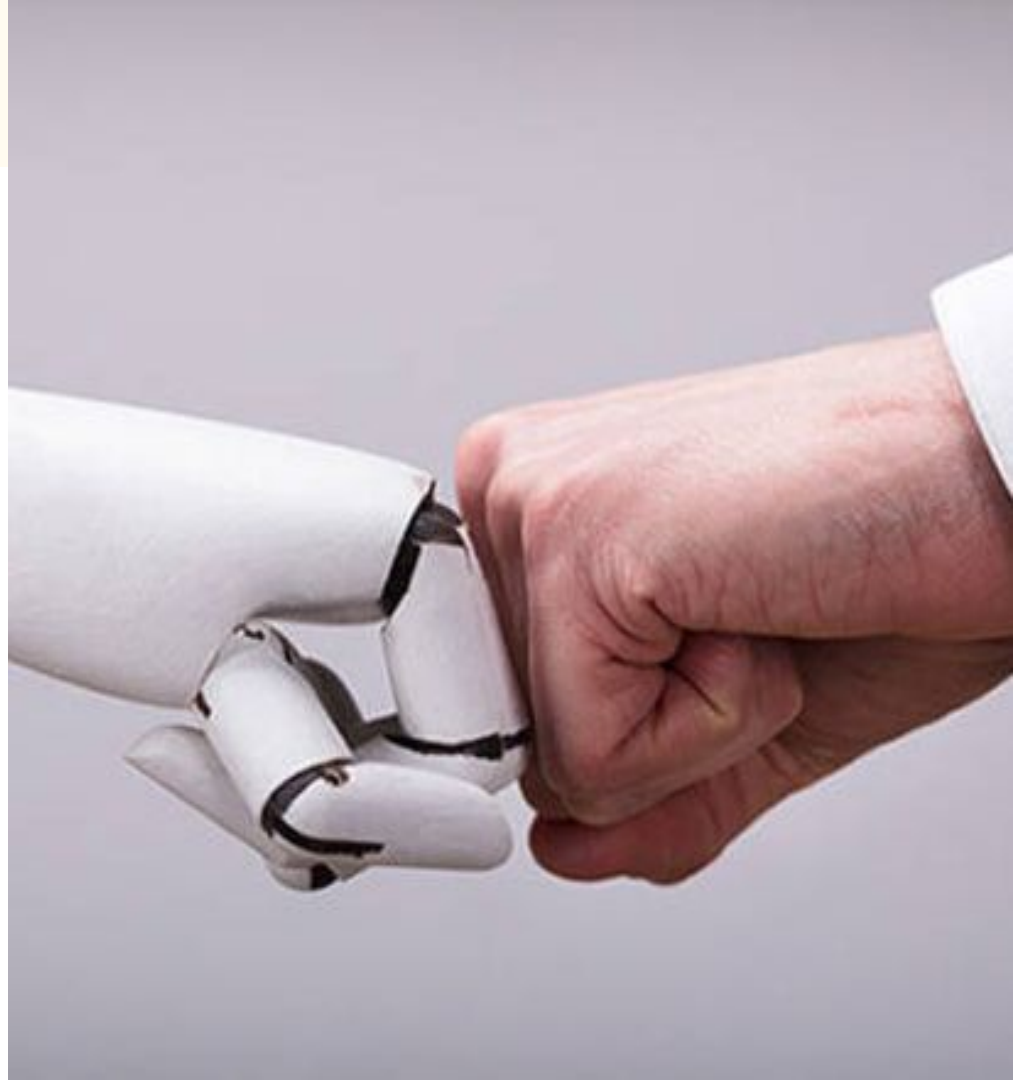
idea: 1

# Companion Robot



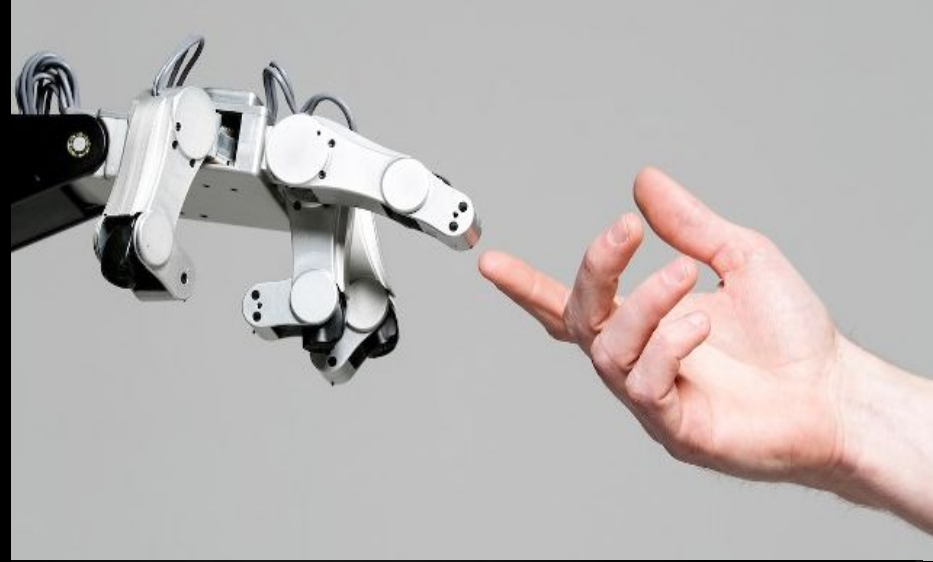
## Background of the Problem:

- Nowadays people are very busy with their own life. They are under several types of pressure and tension of study, work, career, family, relationships, financial problems and a lot of other things. It is not always possible for them to be expressive or get a company so they feel lonely at times. It has caused them depression, anxiety and frustration which has been also the reason for many types of mental health issues. Now it's not possible for everyone to visit a psychiatrist or get a therapy. So it will be very beneficial if a robot can analyse our mood, behaviour and accompany us or help us accordingly. It can also be useful for old people who are living alone or residence of old age home.



# Main features:

1. At first robot will detect its owner.
2. Detect sadness or happiness of the user. [Pepper]
3. proactively start conversation according to user mode. [Ollie]
4. Give suggestions to do something. [Ollie]
5. Set reminder. [Alexa]
6. Facial expression while talking with the user. [paper]



## Objectives:

- To make a robot that will try to ensure mental peace and happiness of people whose mental health is somewhat affected due to something and give them some company.

## Outcomes:

- It will accompany lonely people.
- It will help them to relieve stress, depression and anxiety.
- It will improve mental health of disturbed and frustrated people.
- To sum up, it will act like a friend made of hardware.

# Covered Domain:

- Artificial Intelligence
- Human-Computer Interaction



idea: 2

# Code Simulator

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## Background of the Problem:

For new learner ,learning code or starting the journey alone can be a great hassle. So if code can be simulated line by line it will be a great help in their understanding.



# Main features:

1. First take a snap of the particular code.
2. Then process the image and present a visual workflow of the code.



## Objectives:

- To teach a new learner programming easily and help him to have a great basic.

## Outcomes:

- Make programming easy for new learners.
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# Covered Domain:

- Image Processing

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