



# **Masterclass**

**Introduction to AI  
Sem 1, Foundation Studies UID  
2025**

The background features a dark navy blue gradient. Overlaid on it are three large, semi-transparent teal circles. One circle is positioned at the top center, another is on the left side, and a third is on the right side, partially overlapping the first.

Welcome everyone!

# Contents

- What is AI: definitions and examples
- Types of AI: ANI, AGI, ASI
- Strength and Limitation
- AI in Everyday Life
- History of AI
- Brief introduction to AI agents and Agentic AI
- Explanation of the Research – Ideate – Execute framework and assignment guidelines



# WHAT IS AI?



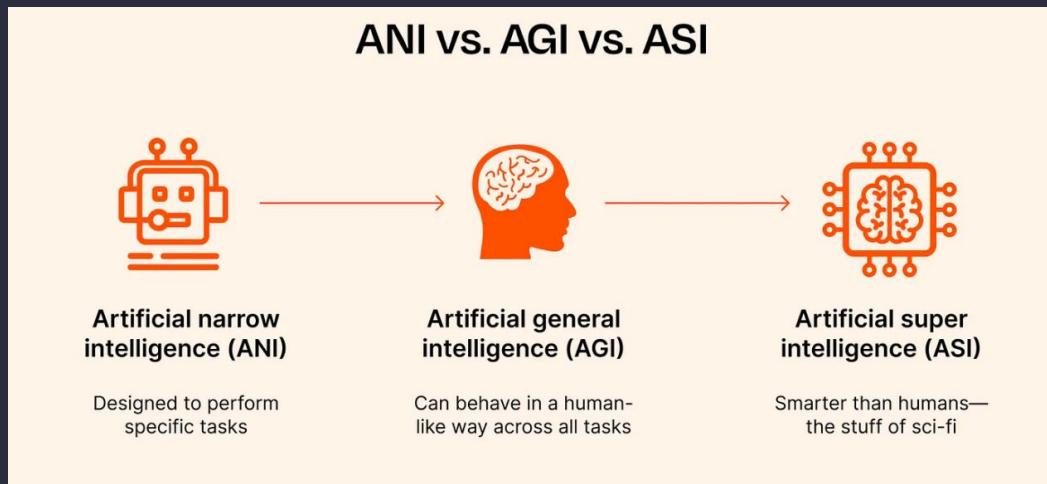
# WHAT IS AI?

Artificial Intelligence is the simulation of human intelligence in machines that are programmed to think, learn, and make decisions like humans.

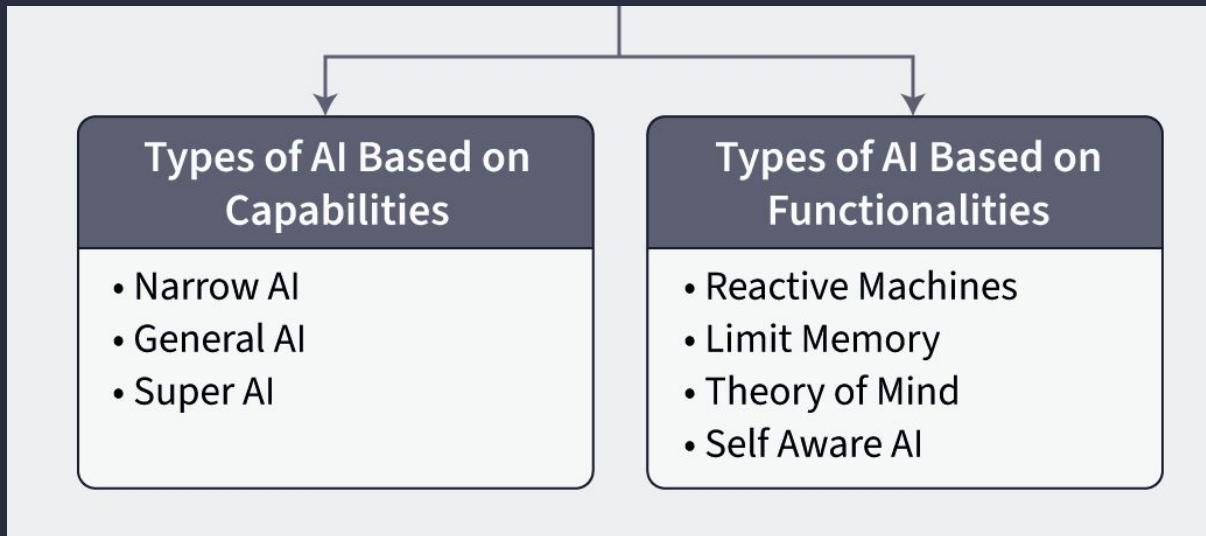
Alternative Definitions:

- "The capability of a machine to imitate intelligent human behavior" - Merriam-Webster
- "AI is a system's ability to correctly interpret external data, learn from such data, and use those learnings to achieve specific goals" - Andreas Kaplan

# TYPES OF AI



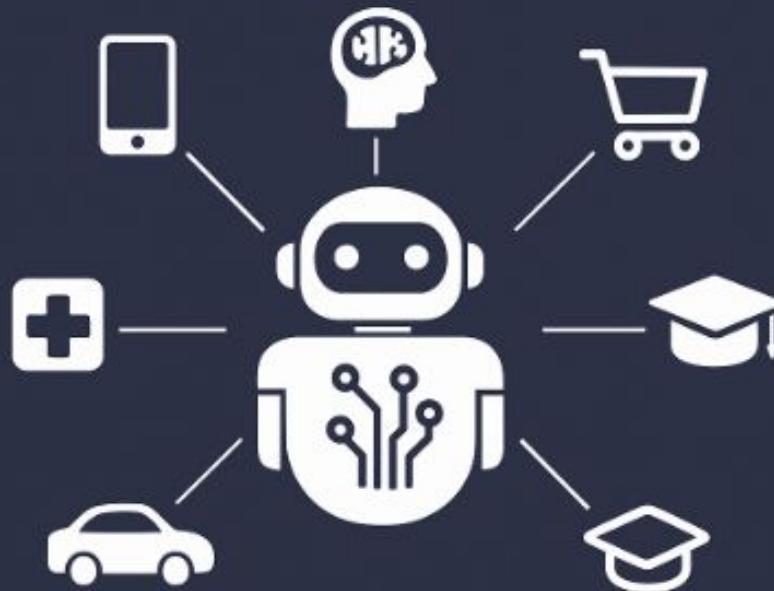
# TYPES OF AI



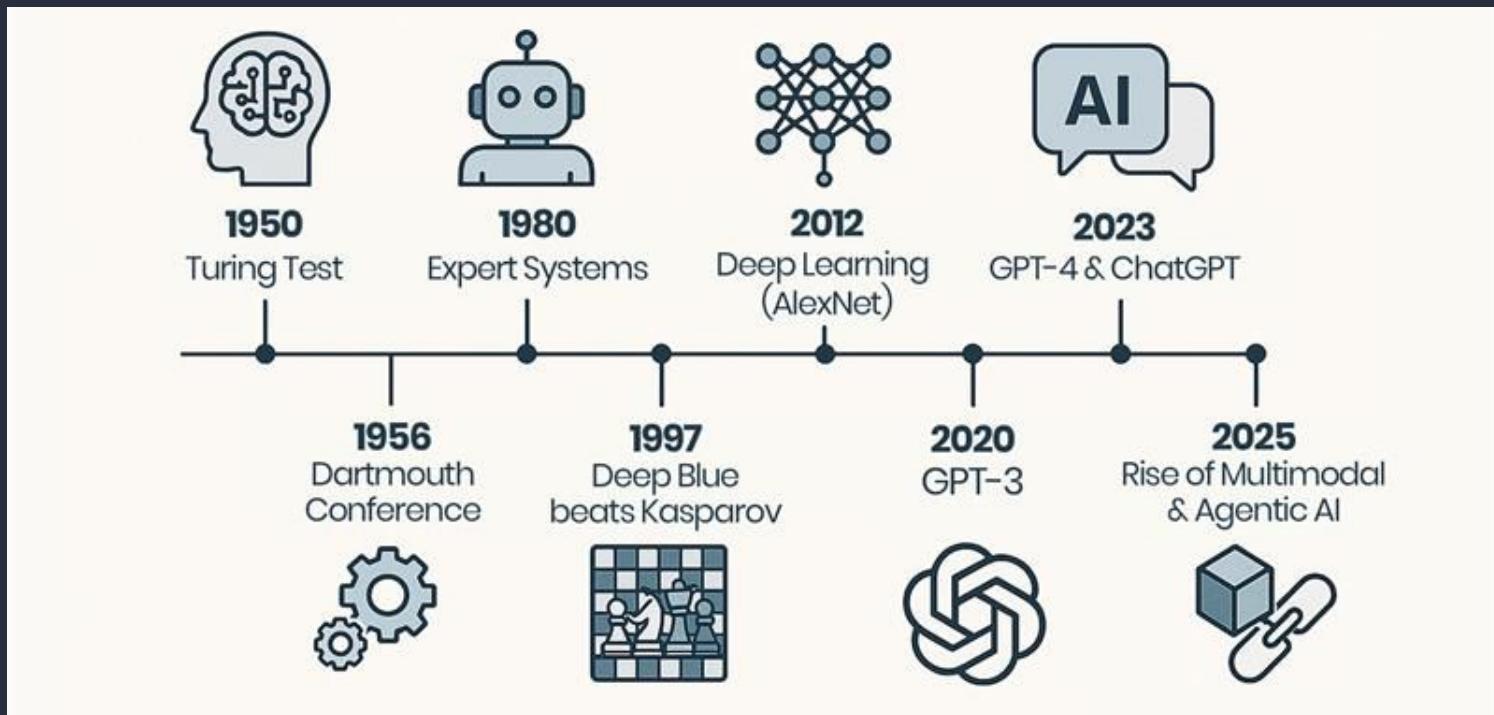
# STRENGTH AND LIMITATION

- **Strengths of AI:**
  - AI excels in processing vast amounts of data rapidly and accurately, uncovering patterns that may elude human analysts.
  - It can operate continuously without fatigue and is capable of optimizing processes in real-time.
- **Limitations of Human Intelligence:**
  - Human decision-making can be subject to biases and emotions, leading to inconsistent performance and irrational choices.
  - Cognitive limitations restrict the ability to analyze large datasets quickly, making humans slower than AI in certain contexts.
- **Synergy between AI and Humans:**
  - While AI can enhance decision-making with data-driven insights, human intuition, creativity, and ethical considerations are irreplaceable. The goal is to foster collaboration, leveraging the strengths of both.

# AI IN EVERYDAY LIFE



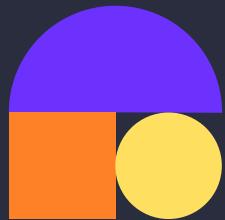
# HISTORY OF AI



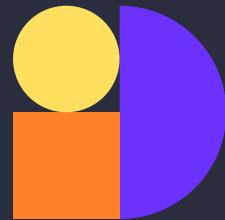
# Design is problem solving

With AI, your canvas for solutions is infinite.  
Don't just design *for* AI, design *with* AI

# NEXT FRONTIER - AI AGENTS



AI AGENTS



AGENTIC AI



AUTONOMOUS AGENTS

# NEXT FRONTIER - AI AGENTS

## **AI Agent**

A program that does tasks for you using AI.

*Example: a chatbot that helps you pick food from a restaurant menu.*

*Tool example: ChatGPT answering your questions.*

## **Agentic AI**

AI that not only answers but also decides and takes steps toward a goal.

*Example: it doesn't just suggest dishes but also books your table.*

*Tool example: Microsoft Copilot planning and executing tasks inside Office apps.*

## **Autonomous Agent**

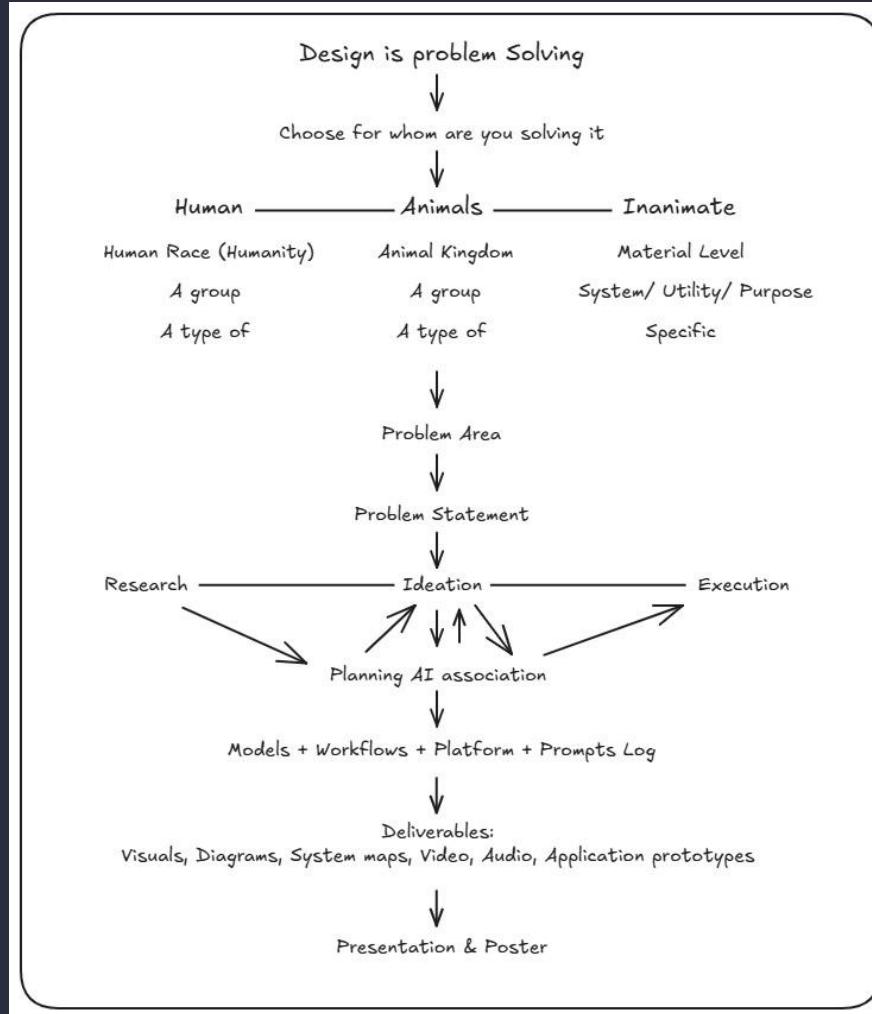
An AI that works on its own without needing step-by-step instructions.

*Example: a delivery robot that takes your food from the kitchen to your house without anyone guiding it.*

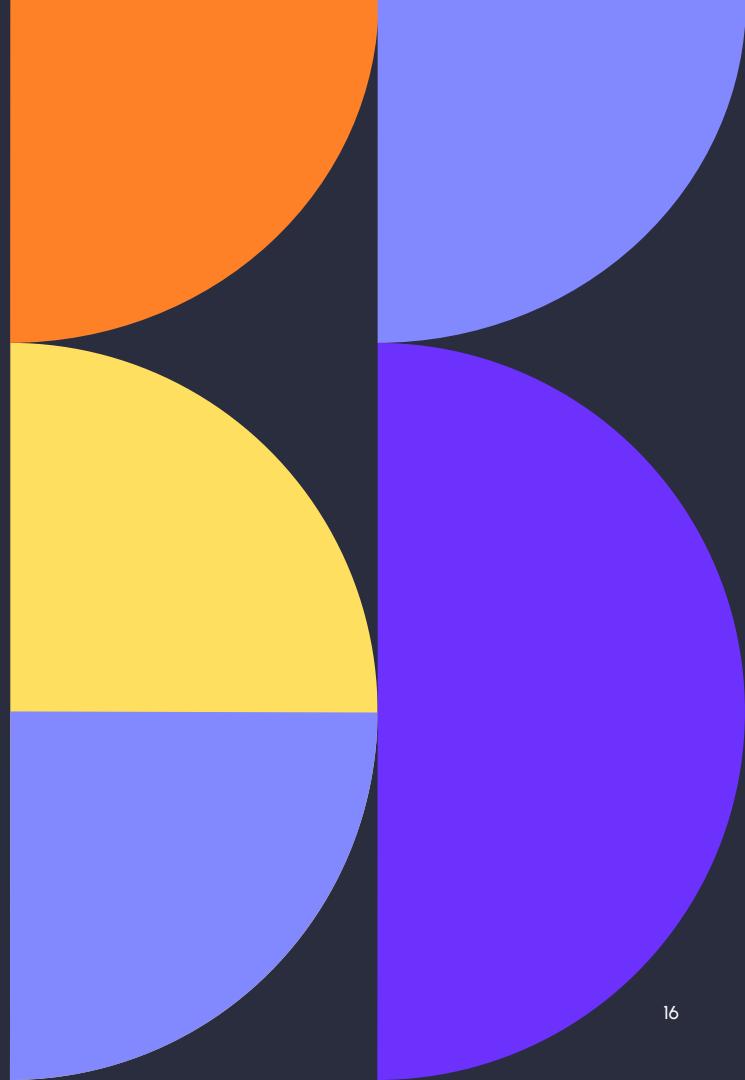
*Tool example: AutoGPT running a project by itself with minimal human input.*

# Module and Assignment

Session Plan - Introduction to AI, Sem-1 Foundation Studies UID 2025.docx



# Q A



Thank you