

From Action to Outcome: Training on Input-Process-Output (IPO) in Real-Life Systems

Here are **25 real-life use cases** from a variety of systems, **ordered from easy to advanced**, to practice identifying inputs, outputs, and process tasks, for each use case you are asked to identify the following:

- Inputs “for each input” (**Type, Count, Operation method, validation, conversion**)
- Outputs “for each output” (**Type, Count**)
- Process (**Single task or multi tasks**, “for each task” **the function input and output**)

◆ **Easy Level (1–8): Basic, straightforward use cases**

1. **User checks account balance at ATM**
 - System: Banking
 2. **User withdraws money from ATM**
 - System: Banking
 3. **User logs into email account**
 - System: Email/Authentication
 4. **User uploads a photo to a social media profile**
 - System: Social Media
 5. **User plays a music file using a music player**
 - System: Media Player
 6. **User sets a reminder on a smartphone**
 - System: Mobile App
 7. **User books a movie ticket online**
 - System: Booking System
 8. **User searches for a recipe on a cooking app**
 - System: Search Engine/App
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◆ **Medium Level (9–17): Multi-step interactions**

9. **User uploads multiple images to generate a slideshow video**
 - System: Multimedia App
10. **User places an online food delivery order**
 - System: E-commerce / Delivery

11. User schedules an appointment with a doctor through a health portal

- System: Health Management System

12. User creates an event and invites friends on a calendar app

- System: Scheduling App

13. User applies for a loan via online banking

- System: Banking / Loan Management

14. User registers and enrolls in a university course

- System: University Portal

15. User customizes and purchases a T-shirt from an online store

- System: E-commerce with customization

16. User installs software using a package manager

- System: OS/Software Installation

17. User reports a bug on a project management platform

- System: Issue/Bug Tracker

◆ **Advanced Level (18–25): Involve data processing, conditional logic, or multiple systems**

18. User uploads a resume and receives job recommendations

- System: Recruitment System

19. User submits tax forms online and gets real-time calculations

- System: E-Government / Tax Filing

20. User uses a smart thermostat to schedule home temperature

- System: IoT / Smart Home

21. User trains a custom AI model on uploaded data

- System: ML Platform

22. User tracks fitness data and gets personalized workout suggestions

- System: Health/Fitness App

23. User reserves a hotel room, flights, and car rental in one session

- System: Travel Booking System

24. User uses a banking app to transfer funds with currency conversion

- System: FinTech / Multi-currency

25. User completes a full patient intake process online before a hospital visit

- System: Hospital Information System