

Data flow diagram

Data flow diagram (DFD) is a significant modeling technique for analyzing and constructing information processes in system.

The DFD visualizes how the system operates, what the system accomplishes and how it will be implemented, when it is refined with further specification.

Individuals seeking to draft a dataflow diagram must identify external inputs and outputs, determine how the inputs and outputs relate to each other, and explain with graphics how these connections relate and what they result in.

Types of DFDs

There are two types of DFDs, both of which support a top-down approach to systems analysis, whereby analysts begin by developing a general understanding of the system and gradually break components out into greater detail:

Logical data flow diagrams - are implementation-independent and describe the system, rather than how activities are accomplished.



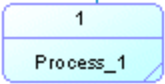





Physical data flow diagrams - are implementation-dependent and describe the actual entities (devices, department, people, etc.) involved in the current system.

Software for drawing DFD

There are a lot of specialized software for drawing DFD:

- Microsoft Visio,
- ErWin Process Modeller or BPWin,
- Power Designer,
- Edraw Max,
- Visual Paradigma.

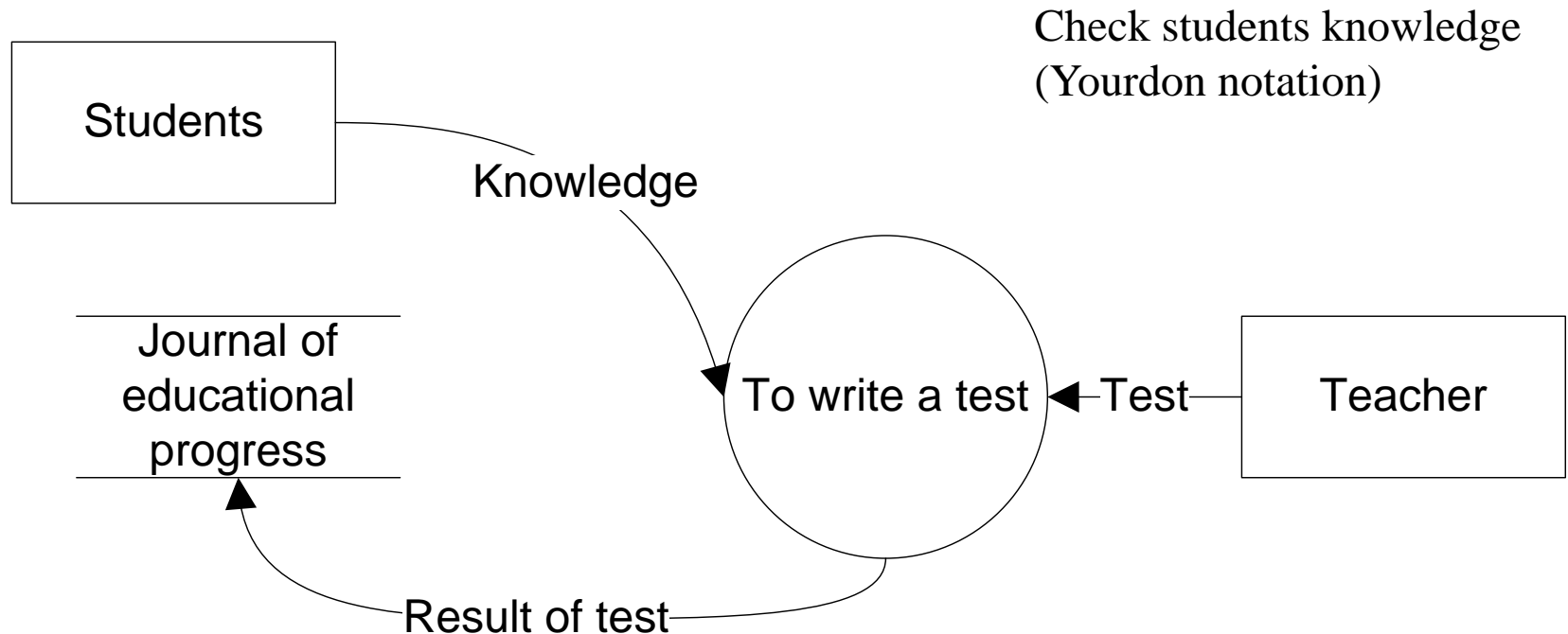
Different notations to draw data flow diagrams

Concept	Gane & Sarson	Yourdon	Description	Example
External Entity			Source or destination of data.	Human, system, subsystem, department
Process			Location where data is transformed.	business activity or any function
Data store			Repository of data.	membership forms, database table
Flow			Oriented link between objects, which conveys data.	flow of information, documentation or objects

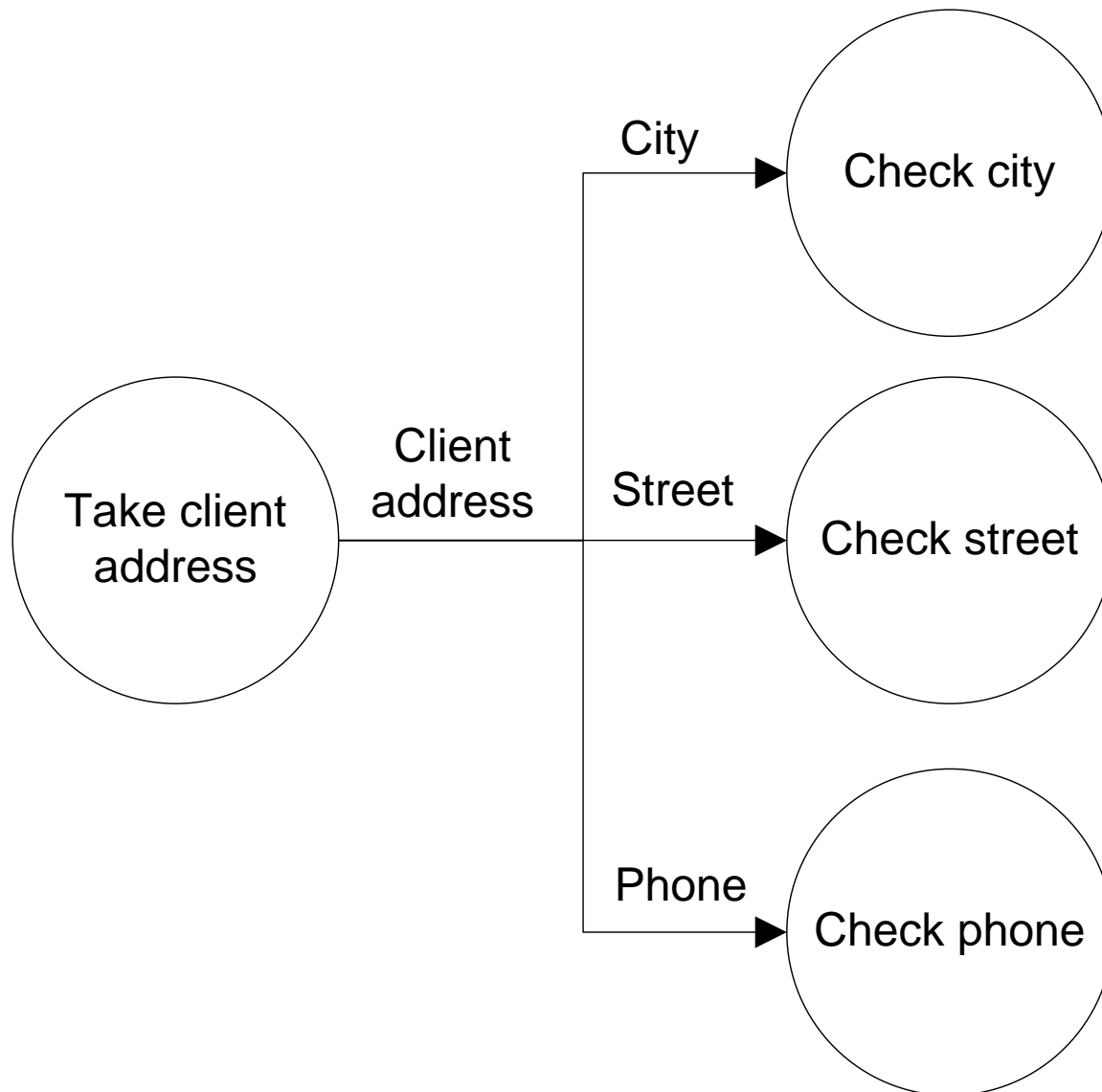
Example of DFD

A data flow represents the flow of information, documentation or objects.

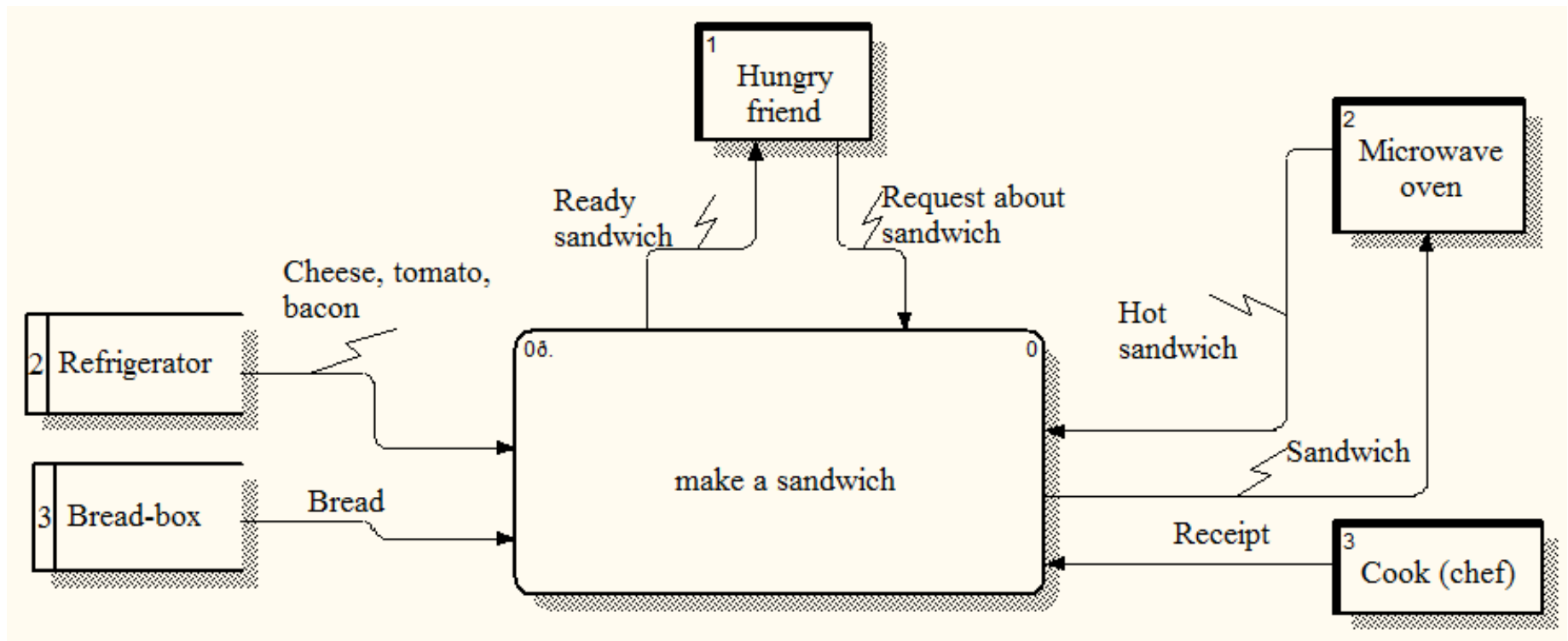
Sometimes a flow can be split into several flows or several flows from different sources can be merged into one flow.



Example of split flow (Yourdon notation).



Context-level for process “to feed friend”



Level 1 for process “to feed friend”

