

Eliciting Data Requirements

Goal:

The goal of this activity is for you to practice the technique of deriving a **data requirements specification** (DRS) from a process model captured as a level-0 **data flow diagram** (DFD).

This technique is often carried out in real-world software development by a data analyst and is preparatory to engaging in database design. In practice, one or more data analysts have one or more joint, interactive face-to-face sessions with one or more stakeholders to understand the process model captured in the level-0 DFD. From such interactions, gradually, through a few iterations, a DRS emerges.

Note that, in this course unit, we cannot teach you process modelling, and hence, you won't be taught the techniques for drawing DFDs (which, of course, also means that you won't be examined on your ability to draw DFDs). However, a data analyst must work from a process model, so you do need to learn how to read a DFD, which is a popular formalism for process modelling.

The 'Data Requirements Specifications from Data Flow Diagrams' document from the 'Extra Material' tab on BlackBoard, explains how to interpret a DFD such as the one in Figure 1. The document also explains the basic approach to deriving a DRS from a DFD that you're going to practice in this examples class. The material in that document was *not* covered in any lecture. By the time this examples class is held, you should have read and studied the document at your own time.

In this activity, the narrower goal is for you to practice the skill of inferring from the DFD questions that, when posed to the stakeholders, elicit answers that allow you, as a data analyst, to capture one or more data requirements to go into the DRS.

The DFD we will base ourselves on in this activity is shown in Figure 1.

Tasks:

1. Using what you have learned by studying the 'Data Requirements Specifications from Data Flow Diagrams' document, write down five questions from the question types in Figure 4 from it.
2. Provide common-sense, intuitive answers (which conform with 1) for the questions you wrote down in response to the previous task.

3. Write down the DRS items that follow from the answers you gave in response to the previous task.

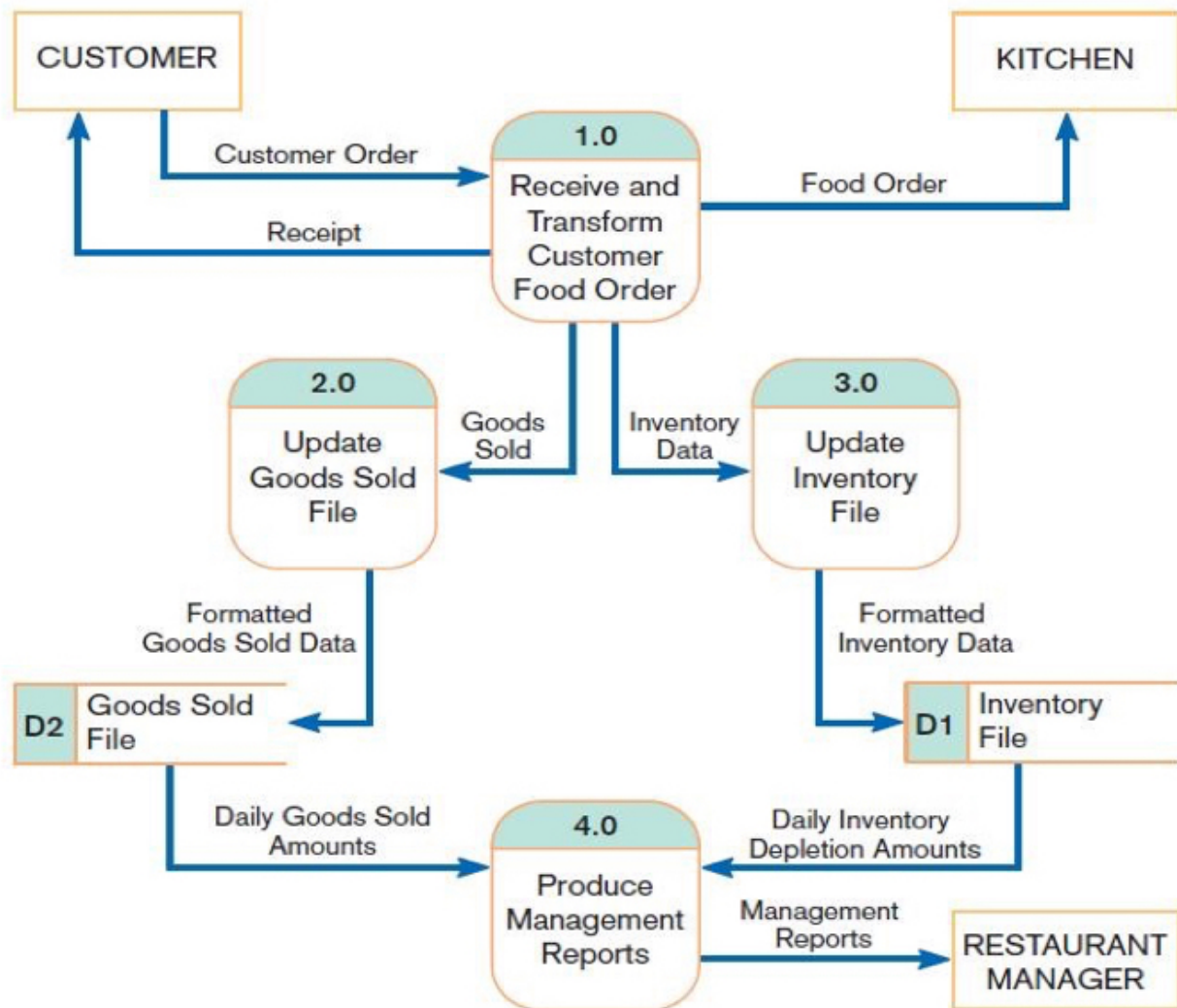


Figure 1: A Level-0 DFD for a Restaurant