

Here is the anatomy of a DFD-0. Note that it is the same as in procedural since it is an external view. (It is not complete)

DFD-0: Inventory Counting System

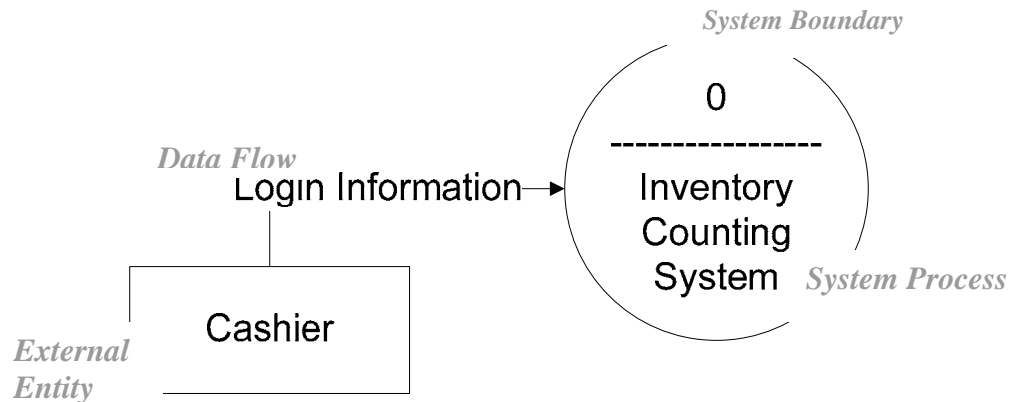


Figure 1: DFD-0

Here is the anatomy of an Elaborated/Extended Use Case based on the DFD-0 above (it is not complete – refer to Figure 4: Object Oriented ETD)

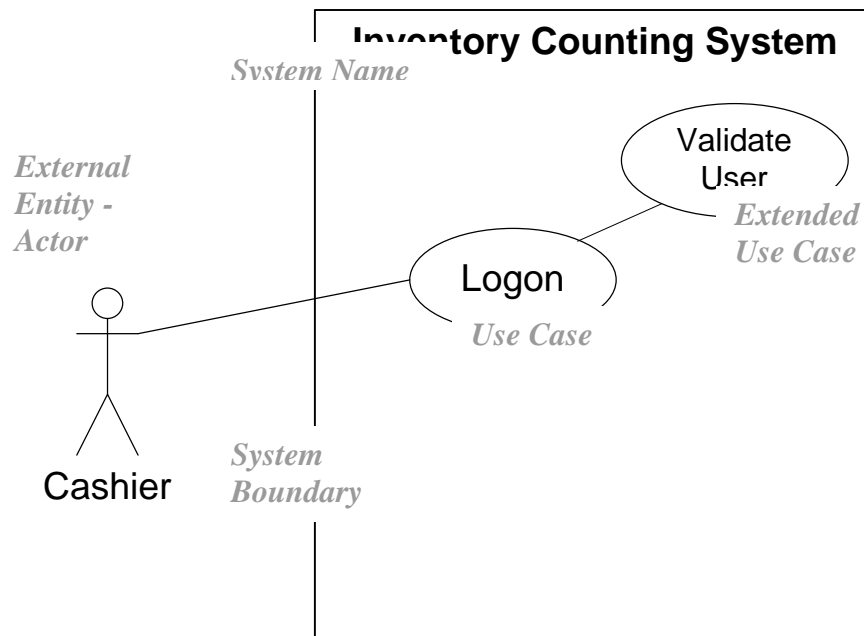
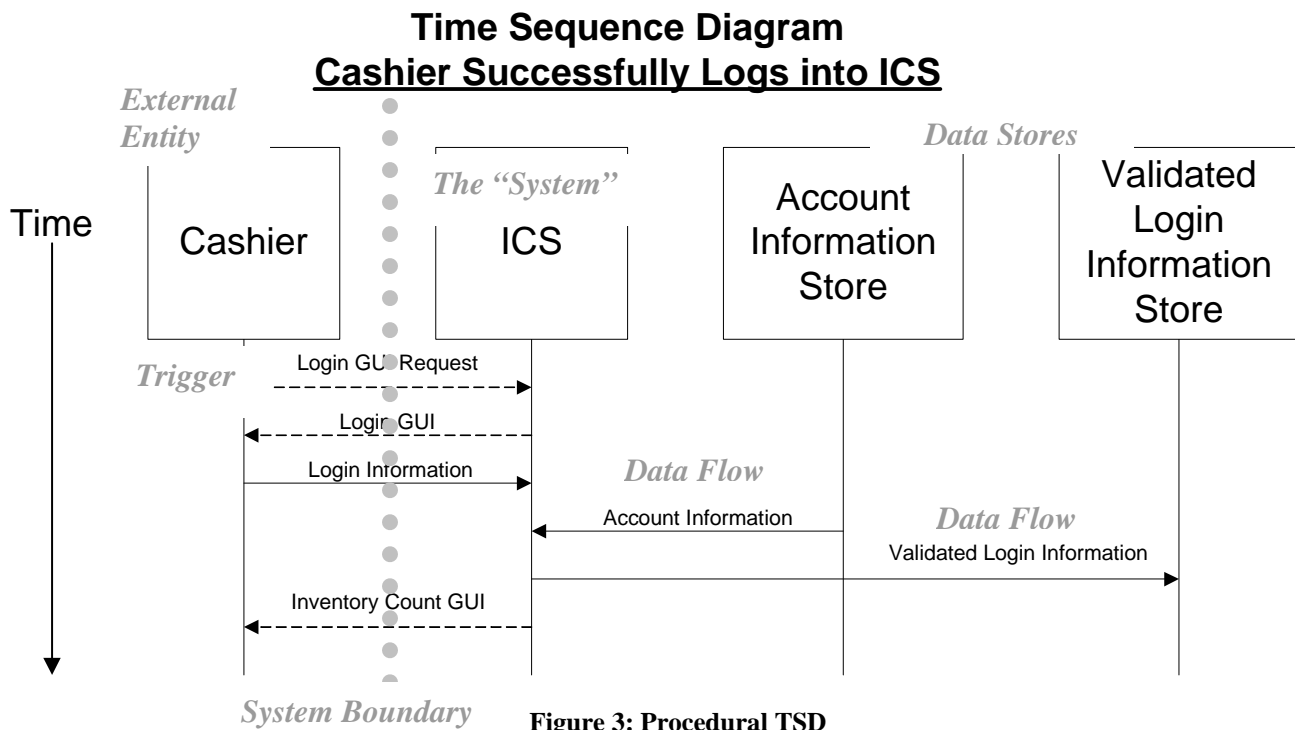
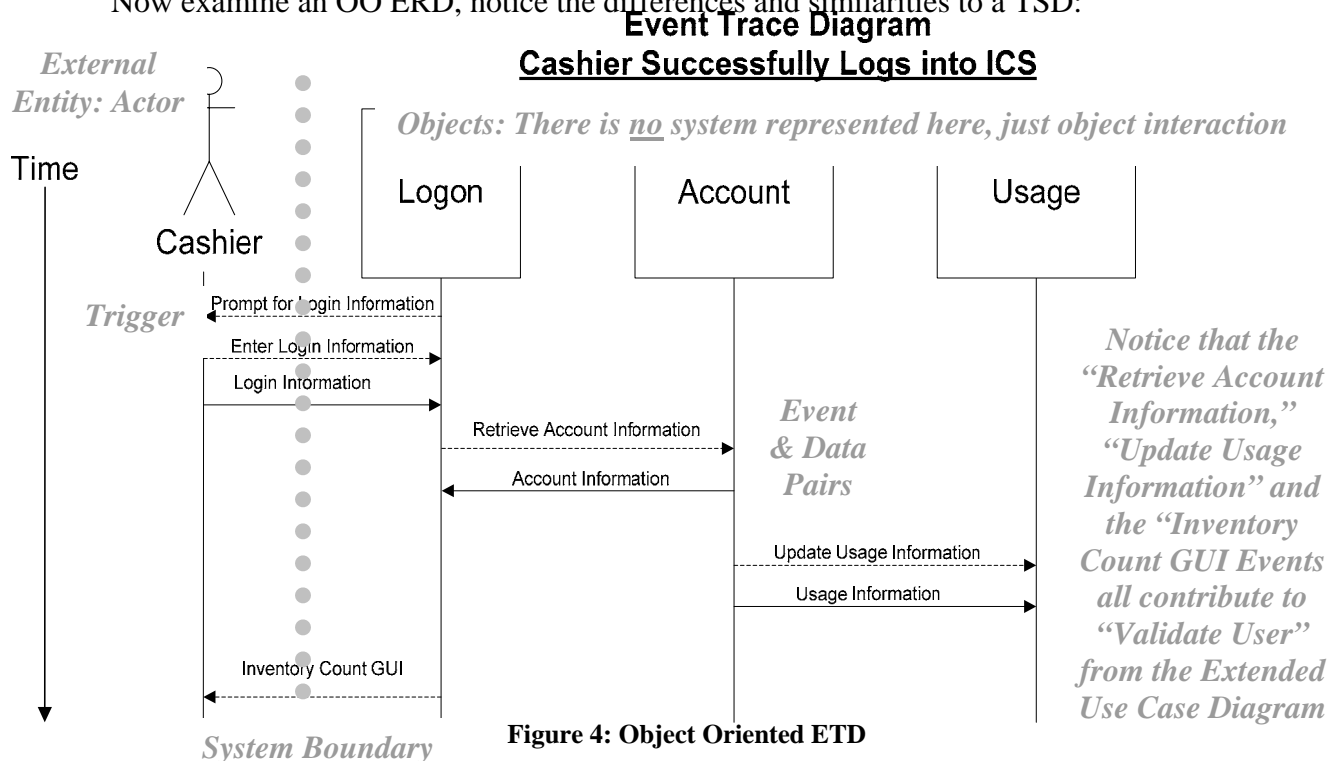


Figure 2: Extended Use Case

Recall the anatomy of a TSD in Procedural Analysis – This is **NOT** part of OO analysis, it is simply shown for comparison purposes:



Now examine an OO ERD, notice the differences and similarities to a TSD:



CRC Cards for the aforementioned Objects:

Class Name: Account	Use Case Cross Reference Paragraph Number: 5a Validate User Login Elaborated Use Case - UC1, UC2
Responsibilities: <ul style="list-style-type: none">• Creates Account Information• Deletes Account Information• Reads Account Information• Updates Account Information	Collaborators: None
Attributes: Account Information	

Figure 5: CRC for Account Class

Class Name: Logon	Use Case Cross Reference Paragraph Number: 5a Validate User Login Elaborated Use Case - UC1, UC2
Responsibilities: <ol style="list-style-type: none">1. Accepts Login Information2. Reads Account Information3. Compares Login Information against Account Information4. If a match occurs<ul style="list-style-type: none">○ Update Usage Information○ Present Cashier with the Inventory Counter GUI○ Presents Administrator with the Administration GUI5. In no match return to step 1	Collaborators: 5 Account Class 7 Usage Class
Attributes: Account Information	

Figure 6: CRC for Logon Class

Finally to link ERDs and Classes, DAO/ORMs (Data Access Objects / Object Relational Models) are used:

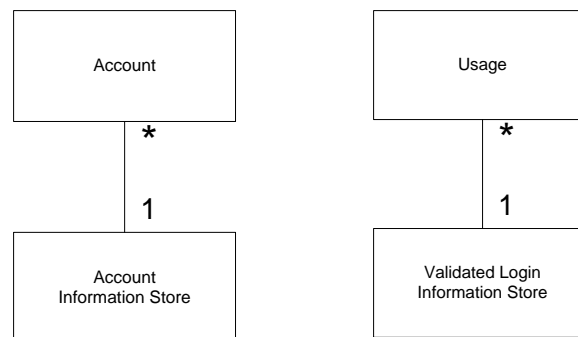


Figure 7: DAO/ORMs for Presented Objects