

# COMP250PSD: Principles of Software Development

## Classroom Exercise 5

### Function Points

### Fall 2012

group member 1: Answers login: Coach

group member 2: \_\_\_\_\_ login: \_\_\_\_\_

group member 3: \_\_\_\_\_ login: \_\_\_\_\_

group member 4: \_\_\_\_\_ login: \_\_\_\_\_

A tracking system for beer warehouse inventory keeps track of what goods are stored in a warehouse. As boxes of beer enter the warehouse, barcodes on the boxes that identify their contents are scanned and a record for each box is entered into a database of stored merchandise. As boxes leave the warehouse, their barcodes are scanned again by a different reader in order to remove them from that database. The barcode indicates the kind of beer and kind of container to be found in the box; a table of codes and meanings determines the correspondence between code and box contents. A user can query the inventory database for the presence or absence of particular kinds of boxes in the warehouse.

Based upon this description only, Please fill out the function point forms below and derive an estimate of the function points for this project.

Domain	Number of entities	Multipliers			Contribution (number of entities times complexity factor)
		Simple	Average	Complex	
External Inputs	2	3	4	6	6
External Outputs	1	4	5	7	4
External Inquiries	1	3	4	6	3
Internal Logical Files	2	7	10	15	20
External Interface Files	6	5	7	10	0

From this, the raw function points are: 33.

Please fill out the following adjustment table:

Does the system require reliable backup and recovery?	0	1	2	3	4	5
Are specialized data communications required to transfer information to or from the application?	0	1	2	3	4	5
Are there distributed processing functions?	0	1	2	3	4	5
Is performance critical?	0	1	2	3	4	5
Will the system run in an existing, heavily utilized operational environment?	0	1	2	3	4	5
Does the system require online data entry?	0	1	2	3	4	5
Does the online data entry require the input transactions to be built over multiple screens or operations?	0	1	2	3	4	5
Are the Internal Logical Files (ILFs) updated online?	0	1	2	3	4	5
Are the inputs, outputs, files, or inquiries complex?	0	1	2	3	4	5
Is the internal processing complex?	0	1	2	3	4	5
Is the code designed to be reusable?	0	1	2	3	4	5
Are conversion and installation included in the design?	0	1	2	3	4	5
Is the system designed for multiple installations in different organizations?	0	1	2	3	4	5
Is the application designed to facilitate change and ease of use by the user?	0	1	2	3	4	5

dist reader

Based upon this, the adjustment points are 14. Final function points = unadjusted points \* (.65 + 0.01 \* adjustment points) = 33 \* (.65 + 0.01 \* 14) = 26.07.

Remember that:

- *External Inputs* (EIs) originate from users or are transmitted from another application.
- *External Outputs* (EOs) are sent to user or to another application.
- *External Inquiries* (EQs) are transactions in which an external source requests and receives information about application state.
- *Internal Logical Files* (ILFs) are logical groupings of data that reside within the application.
- *External Interface Files* (EIFs) are files external to the application that are used by the application.