**2.3.3 – Function Estimate - Hours**

1. Overview

This section describes the methodology used to calculate the estimated number of hours of the project using Function Point Estimation, based on a wider base of knowledge gained from class lectures and working on the SPMP up until this point, as well as the techniques detailed in CIS375 Powerpoint 2 - Software Engineering Project Management, slides 31-37.

1. Estimation
   1. Functionality Breakdown
      1. Overall Functionality
         1. Inventory
            1. Store / Warehouse data updates (store info, item stock, etc)
            2. Item-level data updates
         2. Customer
            1. Point of sale purchasing/ordering
            2. Point of sale customer data updates
         3. Transactions
            1. Batch transactions (overnight)
            2. Online transactions (point of sale)
      2. Category Breakdown
         1. External Inputs (EI)
            1. Store / Warehouse screen - Average
            2. Inventory screen - Average
            3. Point of sale screen - High
            4. Customer account screen - Low
            5. Pharmacy prescription approval / fill screen - Low
            6. Batch file processing input - High
         2. External Outputs (EO)
            1. Store / Warehouse screen - Average
            2. Inventory screen - Average
            3. Point of sale screen - High
            4. Customer account screen - Low
            5. Pharmacy prescription approval / fill screen - Low
            6. Sales screen (reports) - Average
         3. External Inquiries (EQ)
            1. Sales screen (reports) - Average
         4. External Interface Files (EIF)
            1. Vendor order file - Average
         5. Internal Logical Files (ILF)
            1. Transaction table - High
            2. Customer table - Average
            3. Store table – Average
            4. Store/Warehouse Inventory table - Average
            5. Item table - Average
   2. Function Point Valuation

|  |  |  |
| --- | --- | --- |
| Category | How Many | Complexity |
| EI | 2 | 3 |
| EI | 2 | 4 |
| EI | 1 | 6 |
| EO | 2 | 4 |
| EO | 3 | 5 |
| EO | 1 | 7 |
| EQ | 1 | 5 |
| EIF | 1 | 7 |
| ILF | 4 | 10 |
| ILF | 1 | 15 |

* 1. Function Point Summation: 117 Total
  2. Total Hours Estimation: 936 Total Hours