Stockparty - Function Points

Use Case Overview

	FP-Complexity	Time spent
Choose Client	20,68	2
Add/Remove Drinks	38,54	4
Stockcrash	42,3	3
Start Party	42,3	4
Buy Drinks	131,6	13

Calculation of Function Points

We have used tiny tools to calculate the function points of our use cases. Follow this link: (http://groups.engin.umd.umich.edu/CIS/course.des/cis525/js/f00/harvey/FP_Calc.html)

The following complexity adjustment table was used for all use cases:

Complexity Adjustment Table

ITEM	COMPLEXITY ADJUSTMENT QUESTIONS	SCALE (No Influence 0 — Essential 5)					
		0	1	2	3	4	5
1	Does the system require reliable backup and recovery?		●				
2	Are data communications required?					●	
3	Are there distributed processing functions?	●					
4	Is performance critical?			●			
5	Will the system run in an existing, heavily utilized operational environment?		●				
6	Does the system require on-line data entry?			●			
7	Does the on-line data entry require the input transaction to be built over multiple screens or operations?		●				
8	Are the master files updated on-line?					●	
9	Are the inputs, outputs, files or inquiries complex?		●				
10	Is the internal processing complex?		●				
11	Is the code to be designed reusable?				●		
12	Are conversion and installation included in the design?			●			
13	Is the system designed for multiple installations in different organizations?				●		
14	Is the application designed to facilitate change and ease of use by the user?					●	

Domain Characteristic Table | FP Calculation

Use Case: Add/Remove Drinks:

RET	DET	FTR
1	6	1

Domain Characteristic Table

MEASUREMENT PARAMETER	COUNT (value >= 0)	WEIGHTING FACTOR Simple	Average	Complex
Number of User Input	5	○	●	○
Number of User Outputs	1	●	○	○
Number of User Inquiries	0	●	○	○
Number of Files	1	○	●	○
Number of External Interfaces	1	○	●	○

Complexity Adjustment Table | FP Calculation

Number of User Input	Drinkinformations
Number of User Output	New Drink Object
Number of User Inquiries	-
Number of Files	Database Table "Drinks"
Number of External Interfaces	Database

Calculated Function Points: 38,54

Use Case: Stockcrash:

RET	DET	FTR
0	0	0

Domain Characteristic Table

MEASUREMENT PARAMETER	COUNT (value >= 0)	WEIGHTING FACTOR		
		Simple	Average	Complex
Number of User Input	1	●	○	○
Number of User Outputs	1	○	●	○
Number of User Inquiries	0	●	○	○
Number of Files	3	○	●	○
Number of External Interfaces	1	○	●	○

Complexity Adjustment Table | FP Calculation

Number of User Input	Switch to enable/disable stockcrash
Number of User Output	Display status
Number of User Inquiries	-
Number of Files	Config/Status file, Database Tables "Pricehistory, Pricecalculator"
Number of External Interfaces	Database

Calculated Function Points: 42,3

Use Case: Choose Client:

RET	DET	FTR
0	0	1

Domain Characteristic Table

MEASUREMENT PARAMETER	COUNT (value >= 0)	WEIGHTING FACTOR Simple	Average	Complex
Number of User Input	1	●	○	○
Number of User Outputs	1	●	○	○
Number of User Inquiries	0	●	○	○
Number of Files	1	○	●	○
Number of External Interfaces	1	●	○	○

Complexity Adjustment Table | FP Calculation

Number of User Input	Chosen client name
Number of User Output	Success/Fail Info
Number of User Inquiries	-
Number of Files	Config file
Number of External Interfaces	Database

Calculated Function Points: 20,68

Use Case: Startparty:

RET	DET	FTR
0	0	1

Domain Characteristic Table

MEASUREMENT PARAMETER	COUNT (value >= 0)	WEIGHTING FACTOR Simple	Average	Complex
Number of User Input	1	●	○	○
Number of User Outputs	1	○	●	○
Number of User Inquiries	0	●	○	○
Number of Files	3	○	●	○
Number of External Interfaces	1	○	●	○

Complexity Adjustment Table | FP Calculation

Number of User Input	Switch to start/stop party
Number of User Output	Display status
Number of User Inquiries	-
Number of Files	Config/Status file, Database Tables "Pricehistory, Pricecalculator"
Number of External Interfaces	Database

Calculated Function Points: 42,3

Use Case: Buy Drinks:

RET	DET	FTR
3	12	1

Domain Characteristic Table

MEASUREMENT PARAMETER	COUNT (value >= 0)	Simple	Average	Complex
Number of User Input	5	○	●	○
Number of User Outputs	2	○	●	○
Number of User Inquiries	0	●	○	○
Number of Files	6	○	○	●
Number of External Interfaces	2	○	○	●

Complexity Adjustment Table | FP Calculation

Number of User Input	Amount, Drinkids, Userid, Time, PriceEntryID
Number of User Output	Success/Fail Info
Number of User Inquiries	-
Number of Files	Database Table "Consumption, Guest, User, Balance", Config/Status File, DrinkInterface
Number of External Interfaces	Database, Hardware(RFID-Reader)

Calculated Function Points: 131,6

Explanation of Graph
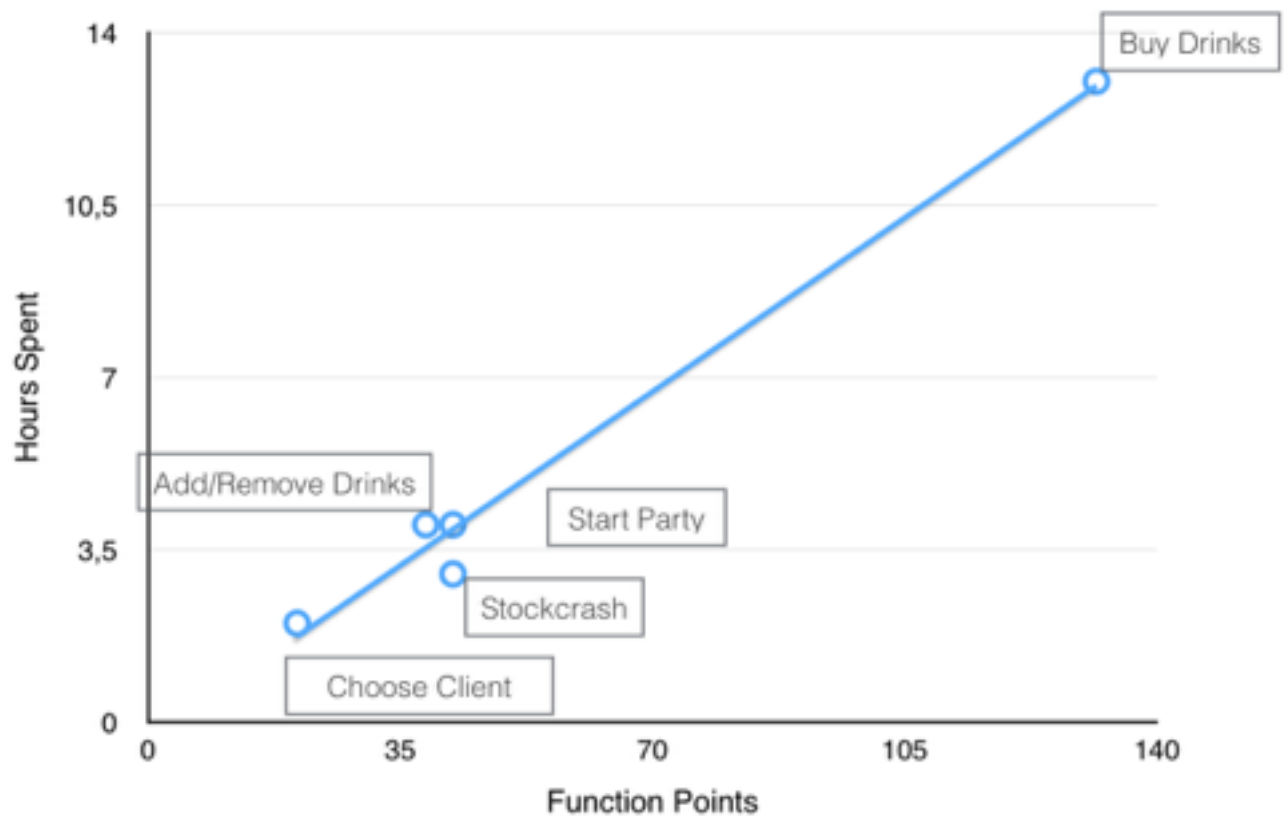
The use cases Start Party and Stockcrash have both a complexity of 42.3, but we spent different times on these use cases. That's because we started implementing Start Party and it we needed to orientate in our system. Because Stockcrash is similar to Start Party it was easy to implement this, because we had the experience from implementing Start Party.