MyCookieBook

Week 14 – Function Points

mycookiebook 18. Apr 2021 Allgemein Edit

Hello Cookies,

this week we calculated function points for our use cases of our project. Function points are measurements to express the amount of business functionality an information system provides to a user.

We used the **Function Points Calculator** to calculate the function points for our use cases. First of all we filled out the Domain Characteristic Table for each use case. Then we filled out the Complexity Adjustment Table to get a more accurate calculation of Function Points and figured out the RETs, DETs and FTRs.

Complexity Adjustment Table

ITEM	COMPLEXITY ADJUSTMENT QUESTIONS	SCALE No Influence 0	1	2	3	4	Essential 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

In the following excel sheet you can see our use cases, their function points, the RETs, DETs, FTRs and their complexity.

Register	RET	DET	FTR	Resulting Complexity	Function Points
External Inputs	1	4	1	Low	11,05
External Output	x	x	x	Low	
External Querie	x	x	x	Low	
Internal Logical Files	x	x	x	Low	
External Interface Files	1	x	x	Low	

Login	RET	DET	FTR	Resulting Complexity	Function Points
External Inputs	1	3	1	Low	7,8
External Output	x	x	x	Low	
External Querie	1	x	x	Low	
Internal Logical Files	x	x	x	Low	
External Interface Files	x	x	x	Low	

Manage recipe	RET	DET	FTR	Resulting Complexity	Function Points
External Inputs	1	12	1	Low	57,85
External Output	x	12	x	Low	
External Querie	x	x	x	Low	
Internal Logical Files	x	x	x	Low	
External Interface Files	1	x	x	Low	

New Use Cases

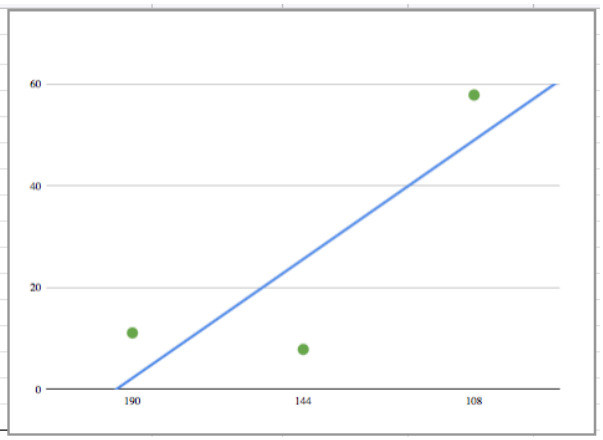
Search recipe	RET	DET	FTR	Resulting Complexity	Function Points
External Inputs	1	2	1	Low	8,45
External Output	1	1	x	Low	
External Querie	1	x	x	Low	
Internal Logical Files	x	x	x	Low	
External Interface Files	x	x	x	Low	

Bookmark favourite recipe	RET	DET	FTR	Resulting Complexity	Function Points
External Inputs	1	1	2	Low	5,2
External Output	x	x	x	Low	
External Querie	x	x	x	Low	
Internal Logical Files	x	x	x	Low	
External Interface Files	1	x	x	Low	

Edit account	RET	DET	FTR	Resulting Complexity	Function Points
External Inputs	1	4	1	Low	11,05
External Output	x	x	x	Low	
External Querie	x	x	x	Low	
Internal Logical Files	x	x	x	Low	
External Interface Files	1	x	x	Low	

We calculated the estimation time of our new use cases based on the time we spent last semester on each use case. The following diagram shows you the function we created with the use cases of last semester. With this method, it is not possible to perform an accurate time estimation for us because we do not have completed use cases yet. For this reason, you see unrealistic values on the table for the new use cases.

Use Case	Estimated	Spent Time (min)	Function
Register	300	190	11,05
Login	400	144	7,8
Manage recipe	400	108	57,85
New Use Case		Calculated Time (min)	
Search recipe		48,69491525	8,45
Bookmark favourite recipe		29,96610169	5,2
Edit account		63,6779661	11,05
Sum of old Ucs		442	76,7
Sum Spent Time / Sum Points	5,762711864		



If you want to have a closer look into this excel sheet, click **here**.

We would love to hear your suggestions!

Stay healthy,

your CookieBook-Team

Related

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2. May 2021
In "Allgemein"

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5 thoughts on “Week 14 – Function Points”

simplesurveyproject

18. Apr 2021 at 22:38

Hey CookieBook,

you have really posted a great blog entry this time! Especially all the graphics make it really understandable what you did during the week.
I also like the fact that you explained at the beginning what exactly Function Points are.
In your Excel spreadsheet you can see very well how exactly you have calculated the Function Points – very good!
It also seems logical to me that managing the recipes is by far the biggest exercise.

As you have already recognised yourselves, you cannot make any precise statements about the future because of missing values. I don’t think that’s a bad thing and I think it’s good that you have drawn the readers’ attention to this.

Looking forward to new updates from you!
Many greetings
SimpleSurvey (Simon)

★ Liked by you

Reply

SweatForSuccess

19. Apr 2021 at 12:47

Hey Team Cookiebook,

Overall it is a great analysis, and I am certain, this will help you manage the remaining tasks and time. Some questions popped into mind when looking at your blog. Maybe you can answer some of them or want to think about them for yourself.
how did you determine the different values? What criteria needed to be met to be more or less critical?
How do you think your expected numbers will change? Do you think you will need more or less time than estimated?

How will this affect your planning the remaining time moving forward?

Keep up the good work

Hakuna Matata
Sweat4Succes

★ Like

Reply

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mycookiebook

20. Apr 2021 at 10:59

Hey Team SweatForSuccess,
First of all thank you for you comment.

We used a table from the internet and used all the calculations of them.
We tried to fill the table with the best input we could use, so the Use Cases and the expected time are possibly calculated the best way.
In the end we can't really make a statment for the future because of the incomplete Use Cases.

Stay healthy.

Your MyCookiebook Team

★ Like

Reply

CORGA B4 - Jonas Bürgel

20. Apr 2021 at 15:36

Hey Team MyCookieBook,

You did a very good job this week. Your sheet and everything looks great and is understandable.

I would have liked to see the calculation of your function points in your linked excel. But that's just a very minor thing.
(Here is the calculation: **https://static.javatpoint.com/tutorial/software-engineering/images/software-engineering-functional-point-fp-analysis2.png**)

Also I want to ask you how you determined the 'count' value because my team and I could not figure out what it means.

Kind regards,
Jonas

★ Like

Reply

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mycookiebook
27. Apr 2021 at 09:03

Hi Jonas,

Thanks for your feedback!

we have determined this value based on our individual use cases. For example, the “register” use case has 4 inputs: email address, password, confirm password, and the register button. The value of “Number of External Interfaces” is 1 in our case, everything else is 0.
I would recommend to have a look at the lecture slides for detailed explanation. Feel free to contact us again if you have further questions.

Best regards,
MyCookieBook Team

★ Like

Reply

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