

# CookieApp      Function Points

This Document features the Function Points of the Use Cases that have been and will be implemented for the software project CookieApp.

The number of Function Points estimates the difficulty and size of the Use Case. It is most certain, that a Use Case containing more Function Points also needs more time in development.

When connecting already implemented Use Cases the result will be a trendline. With this line you are able to estimate the duration and workload for the implementation of Use Cases to be implemented.

The following table shows the Use Cases, the time in hours for the implementation and the number of Function Points.

The first three Use Cases are already implemented. The second 6 are estimations for Use Cases to be implemented.

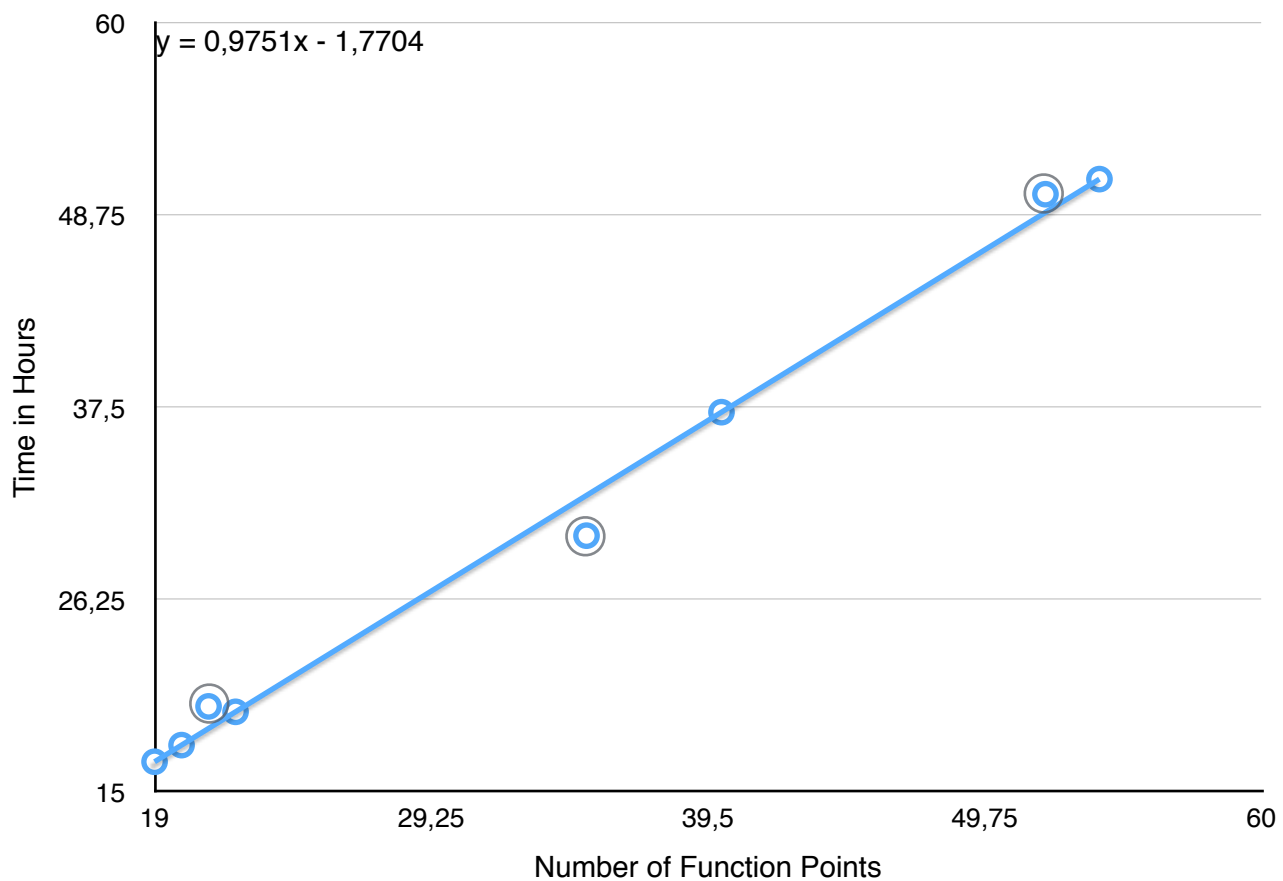
UseCase	Time in hours	Number of Function Points
Login	20	21
Register	30	35
Create Recipe	50	52
Leave Comment	16,7565	19
Leave Suggestion	16,7565	19
Delete Recipe	17,7316	20
View Recipe	19,6818	22
Edit Recipe	37,2336	40
Search for Recipe	50,885	54

With the following Function you are able to Calculate the time in hours for a specific number of Function Points.

**Time in Hours = FunctionPoints x 0,9751 - 1,7704**

The Following place shows the number of Function Points on the X-Axis and the number of hours needed in the Y-Axis.

The outliers are not that way of the trendline, but this is must certainly do to the fact, that there is much overhead, because the implementation face has just begun and a lot of organization is inside that time.



The next table shows the settings uses to get the calculation for the Function Points. These settings have been used for the entire project and all Use Cases.

**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?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	Are data communications required?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
3	Are there distributed processing functions?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
4	Is performance critical?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	Will the system run in an existing, heavily utilized operational environment?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	Does the system require on-line data entry?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	Does the on-line data entry require the input transaction to be built over multiple screens or operations?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	Are the master files updated on-line?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	Are the inputs, outputs, files or inquiries complex?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	Is the internal processing complex?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	Is the code to be designed reusable?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	Are conversion and installation included in the design?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	Is the system designed for multiple installations in different organizations?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	Is the application designed to facilitate change and ease of use by the user?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# CookieApp      Function Points

## UseCase: Login

User Input	User Output	User Inquiries	Files	External Interfaces	Function Points
2	2	1	1	0	20,1
Input Fields	User Notification, Header	Login Button	User Table		

RET	DET	FTR
1	5	1

MEASUREMENT PARAMETER	COUNT (value >= 0)	WEIGHTING FACTOR		
		Simple	Average	Complex
Number of User Input	<input type="text" value="2"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of User Outputs	<input type="text" value="2"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of User Inquiries	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of Files	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of External Interfaces	<input type="text" value="0"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

# CookieApp      Function Points

## UseCase: Register

User Input	User Output	User Inquiries	Files	External Interfaces	Function Points
4	4	2	1	0	34,4
Input Fields	User Notification, Header, Input-Checker	Register Button, Accept Terms	User Table		

RET	DET	FTR
1	10	1

MEASUREMENT PARAMETER	COUNT (value >= 0)	WEIGHTING FACTOR		
		Simple	Average	Complex
Number of User Input	<input type="text" value="4"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of User Outputs	<input type="text" value="4"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of User Inquiries	<input type="text" value="2"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of Files	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of External Interfaces	<input type="text" value="0"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

## UseCase: Create Recipe

User Input	User Output	User Inquiries	Files	External Interfaces	Function Points
6	4	2	2	0	52
Input Fields, Picture	User Notification, Input-Checker	Register Button, Accept Terms	User Table, Recipe Table		

RET	DET	FTR
2	12	1

MEASUREMENT PARAMETER	COUNT (value >= 0)	WEIGHTING FACTOR		
		Simple	Average	Complex
Number of User Input	<input type="text" value="6"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Number of User Outputs	<input type="text" value="2"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Number of User Inquiries	<input type="text" value="2"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Number of Files	<input type="text" value="2"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Number of External Interfaces	<input type="text" value="0"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

## UseCase: Leave Comment

User Input	User Output	User Inquiries	Files	External Interfaces	Function Points
2	2	1	1	0	19
Input Fields	Recipe, Comment	Submit Button	Recipe Table		

RET	DET	FTR
1	5	1

MEASUREMENT PARAMETER	COUNT (value >= 0)	WEIGHTING FACTOR		
		Simple	Average	Complex
Number of User Input	<input type="text" value="3"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of User Outputs	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of User Inquiries	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of Files	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of External Interfaces	<input type="text" value="0"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

## UseCase: Leave Suggestion

User Input	User Output	User Inquiries	Files	External Interfaces	Function Points
2	2	1	1	0	19
Input Fields	Suggestion, Recipe	Submit Button	Recipe Table		

RET	DET	FTR
1	5	1

MEASUREMENT PARAMETER	COUNT (value >= 0)	WEIGHTING FACTOR		
		Simple	Average	Complex
Number of User Input	<input type="text" value="3"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of User Outputs	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of User Inquiries	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of Files	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of External Interfaces	<input type="text" value="0"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>



## UseCase: Delete Recipe

User Input	User Output	User Inquiries	Files	External Interfaces	Function Points
1	1	1	2	0	20
Recipe	Confirmation	Delete Button	Recipe Table, User Table		

RET	DET	FTR
2	3	1

MEASUREMENT PARAMETER	COUNT (value >= 0)	WEIGHTING FACTOR		
		Simple	Average	Complex
Number of User Input	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of User Outputs	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of User Inquiries	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of Files	<input type="text" value="2"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of External Interfaces	<input type="text" value="0"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

# CookieApp      Function Points

## UseCase: View Recipe

User Input	User Output	User Inquiries	Files	External Interfaces	Function Points
0	4	1	1	0	22
	The Recipe, Picture, Description, Comments	The Recipe Name	Recipe Table		

RET	DET	FTR
1	5	1

MEASUREMENT PARAMETER	COUNT (value >= 0)	WEIGHTING FACTOR		
		Simple	Average	Complex
Number of User Input	<input type="text" value="0"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of User Outputs	<input type="text" value="4"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of User Inquiries	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of Files	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of External Interfaces	<input type="text" value="0"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

## UseCase: Edit Recipe

User Input	User Output	User Inquiries	Files	External Interfaces	Function Points
6	2	2	1	0	40
Recipe Name, Picture, Description, Ingredients, Amount	The Recipe, Confirmation	Save, Cancel	Recipe Table		

RET	DET	FTR
1	8	1

MEASUREMENT PARAMETER	COUNT (value >= 0)	WEIGHTING FACTOR		
		Simple	Average	Complex
Number of User Input	<input type="text" value="6"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Number of User Outputs	<input type="text" value="2"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of User Inquiries	<input type="text" value="2"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Number of Files	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of External Interfaces	<input type="text" value="0"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

# CookieApp      Function Points

## UseCase: View Recipe

User Input	User Output	User Inquiries	Files	External Interfaces	Function Points
0	4	1	1	0	22
	The Recipe, Picture, Description, Comments	The Recipe Name	Recipe Table		

RET	DET	FTR
1	5	1

MEASUREMENT PARAMETER	COUNT (value >= 0)	WEIGHTING FACTOR		
		Simple	Average	Complex
Number of User Input	<input type="text" value="0"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of User Outputs	<input type="text" value="4"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of User Inquiries	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of Files	<input type="text" value="1"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of External Interfaces	<input type="text" value="0"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

## UseCase: Search Recipe

User Input	User Output	User Inquiries	Files	External Interfaces	Function Points
8	2	2	2	0	54
Recipe Name, Description, Ingredients, Amount User	The Recipes,	Search, Clear	Recipe Table, User Table		

RET	DET	FTR
2	12	1

MEASUREMENT PARAMETER	COUNT (value >= 0)	WEIGHTING FACTOR		
		Simple	Average	Complex
Number of User Input	<input type="text" value="8"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Number of User Outputs	<input type="text" value="2"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Number of User Inquiries	<input type="text" value="2"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Number of Files	<input type="text" value="2"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of External Interfaces	<input type="text" value="0"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>