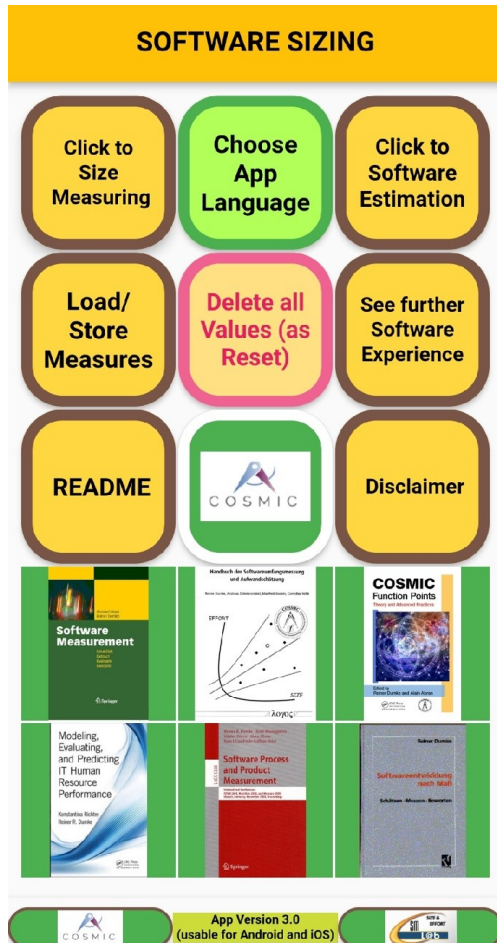


THE SOFTWARELITE APP

by Reiner R. Dumke



SoftwareLite helps to accurately measure the software scope. This app serves mainly for the application of the **COSMIC Function Point method** (as **International Standard ISO/IEC 19761**) in a simplified form and can be used via the button "Software Sizing". Up to 20 so-called functional processes and up to 15 associated data groups (as identification of the COSMIC metrics (data movement)) can be defined/ acquired.

The determination of the COSMIC Function Points (CFP) with the four sub metrics Entries, Exits, Reads and Writes then takes place via the COSMIC Sizing Button whereby each functional process receives its CFP and the total CFP (Total CFP) is then displayed.

This app also enables the application of a shortened COSMIC method as Early & Quick Method and the local extension approach of the process CFPs (e.g. by considering the "inner" functional scope) as Extend Method. The measurement data can be provided with an identification and stored within the app (and reloaded later).

For helpful information the app pages contain links to the COSMIC community, to SML@b, to our metrics bibliography on our GI website as well as to the risks of Peter Neumann and a SWEBOK classification for software engineering in general.

This App is useful for short and fast project management in the agile development and as educational support for computer science students and professionals.

This (Lite) app calculates the software scope, stores the respective measurement results and motivates for the application of the cost estimation possibilities and the project controlling with the SoftwareExpert app.

(SoftwareLite app is free)

Software Sizing:

Software sizing starts with the definition of the Size measurement characteristics in the **Size Measure Description**.

SOFTWARE SIZE MEASUREMENT

Size Measure Description

Definition of Funct. Processes

COSMIC CFP Counting

CFP Early and Quick Approach

COSMIC Local Extension Approach

Show the Measure s Report

Go Back

1

SIZE MEASURE DESCRIPTION

Define Size Measurement Description in following:

Show Current Size Measure Descr.

Measurement Purpose:

Measurement Scope:

Measurement Granularity:

Measurement Boundary:

COSMIC version:

related COSMIC Pattern:

Measurement Report Title:

Measurement Report Version:

Help

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After these inputs, the **Functional Processes** (limited by 20) are defined as basic of size measurement. Each functional process can contain several (limited by 15) data groups in order to identify the data movements.

2

DEFINE FUNCTIONAL PROCESSES

Measurement Purpose:

Define the (max. 20) Functional Processes

Start DEFINE Funct. Proc. (DEF. deletes existings)

Next Funct. Process

Previous Funct. Proc.

Funct. Proc. Index (1-20):

Functional Process (FP)

Funct. Object (optional)

Define the (max. 15) Data Groups per Process

Next Data Group

Previous Data Group

Data Group Index (1-15):

Data Group:

Show the Functional Processes: (use the Next and Previous Buttons)

SHOW Funct. Proc. (use DEF./SHOW exclusively)

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3

COSMIC CFP COUNTING

Measurement Purpose:

Select the Functional Process and define the respective CFP value

Start CFP definitions

Def. CFP for next FP

Funct. Proc. Index (1-20):

Functional Process (FP)

Funct. Object (optional)

Show next Data Group

Data Group Index (1-15):

Data Group:

COUNTING: Use ADD/SUB or SET exclusively

Add Entry

Sub Entry

Set Entry

Add Exit

Sub Exit

Set Exit

Add Read

Sub Read

Set Read

Add Write

Sub Write

Set Write

Funct. Proc. CFPs:

Sum Total CFPs:

Help

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SHOW MEASUREMENT REPORT

Show Description

Measurement Report Title:

Measurement Report Version:

Measurement Purpose:

Measurement Scope:

Measurement Granularity:

Measurement Boundary:

COSMIC version:

related COSMIC Pattern:



Show Measure Report

Help


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The **COSMIC CFP Counting** supports the size measurement based on the **Entry, Exit, Read** and **Write** metrics. The **Set** buttons help in the case of large metrics values.

Every size measurement page have a **Help** button. The **Help** for counting includes an overview about the **COSMIC patterns** in order to support the COSMIC software model.

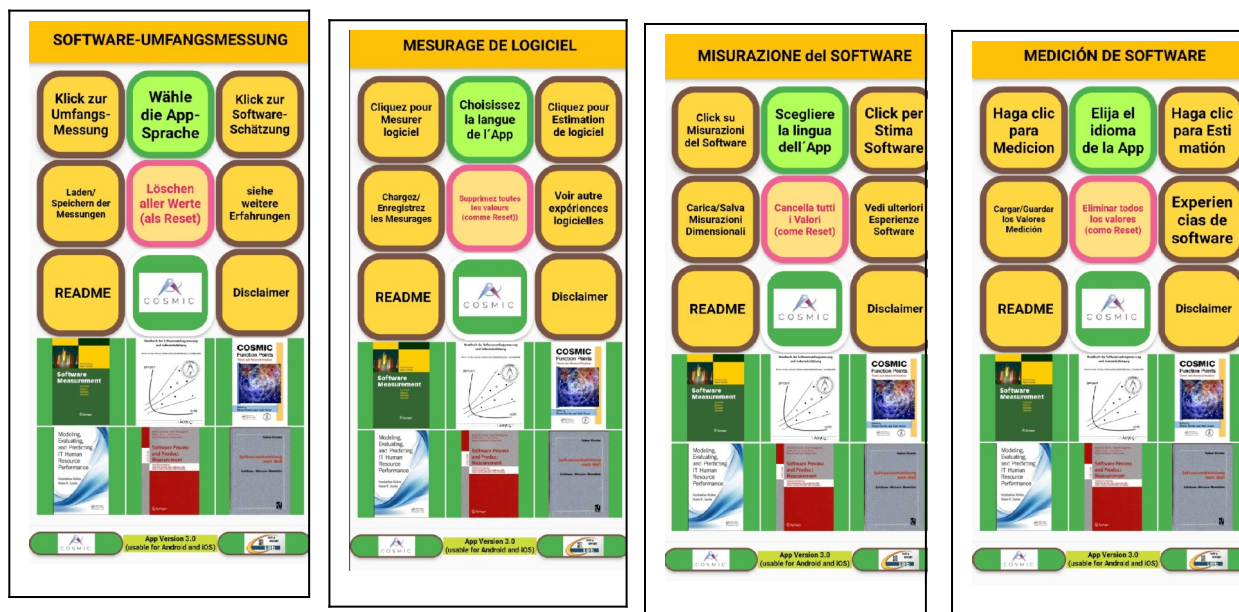
COSMIC LOCAL EXTENSION	
Measurement Purpose:	
Start of the FP-based CFP extension	Define CFP extension for next FP
Funct. Proc. Index (1-20):	index was generated
Functional Process (FP)	shows functional process
func. Proc. CFPs	current CFP value
COSMIC Local Extension per Funct. Process	
Define CFP Value Extension	enter FP - CFP extension
Add CFP Extension	extended FP related CFP
Subtract from Total CFP	
Sum Total CFP:	executed total CFP
	
	
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A COSMIC size measurement can be **stored** or **loaded** using the Load/Store button on the data base app facilities.

LOAD/STORE MEASUREMENTS	
ID List of Stored Size Measurements	
ooo MeasureID list	
Load Size Measures from Database	enter MeasureID for loading
Delete ID Size Measures in Database	enter MeasureID for delete
Delete All Measures in Database (really?)	enter "yes" for all delete
Stored Measurements into Database	enter MeasureID for saving
	
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SELECT THE APP LANGUAGE	
English	
	
Deutsch	
	
Français	
	
Español	
	
Italiano	
	
	
Go Main Menu	

The **SoftwareLite** app is usable in five languages: **English**, **German**, **French**, **Italy** and **Spain**.



depending on the language setting of your Smartphone/Tablet. This **SoftwareLite** app are based on our COSMIC books:

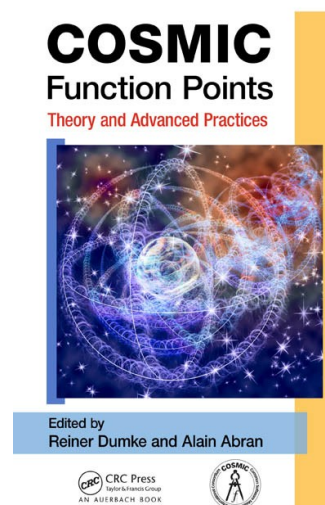
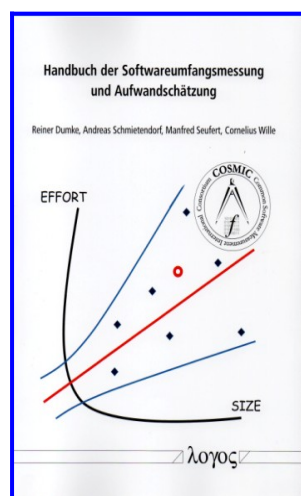
Dumke, R., Abran, A.:

COSMIC Function Points – Theory and Advanced Practices
CRC Publ., Boca Raton, 2011 (334 p.) ISBN 978-1-4398-4486-1

and

Dumke, R., Schmietendorf, A., Seufert, M., Wille, C.:

Handbuch der Softwareumfangsmessung und Aufwandschätzung
Logos Verlag, Berlin, 2014 (570 p.), ISBN 978-3-8325-3784-5



The **SoftwareLite** app can be helpful in computer science education in order to better understand the complexities and relationships in software project management in practices.