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.

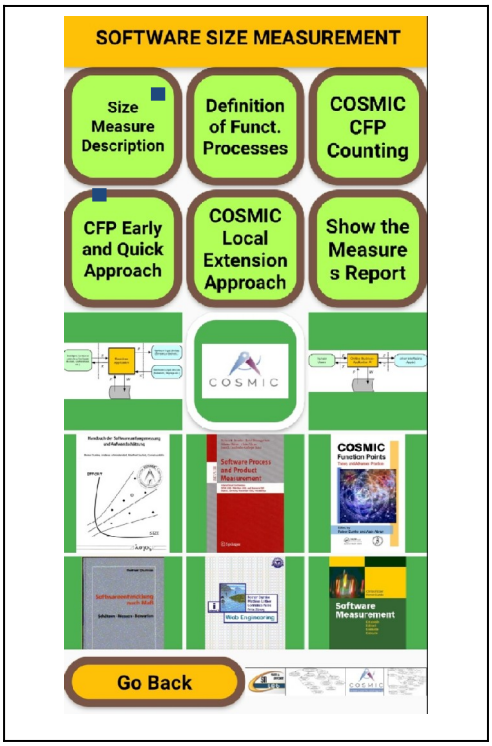
This App is useful for short and fast project management in the agile development and as educational support for computer science students and professionals.

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.***



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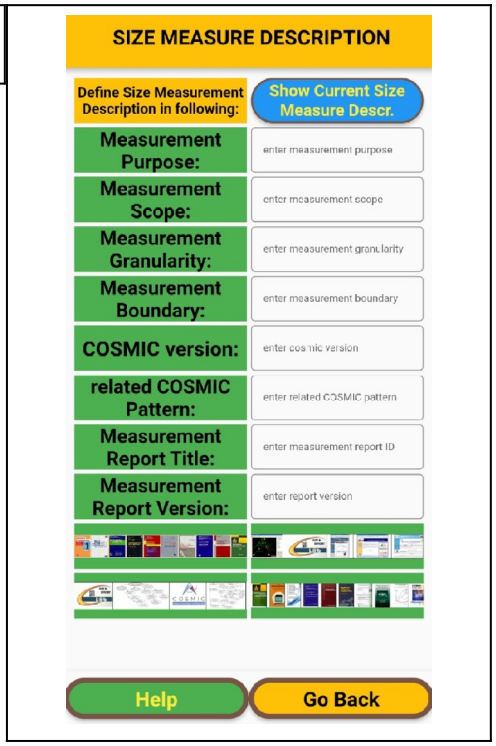
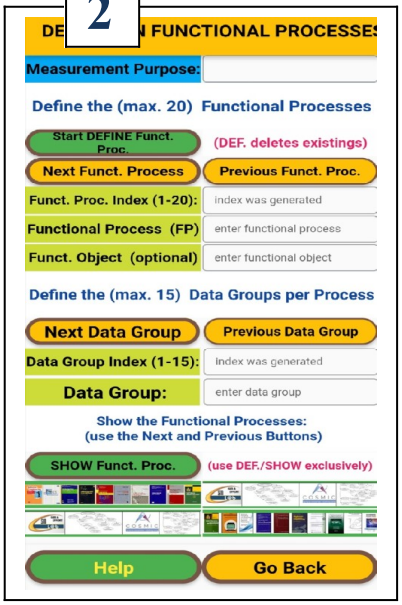


After these inputs, the ***Functional Processes*** (limited by 20) are defined as basic of size measurement. Each functional process can contain several (limited by 15) data groups in order to identify the data movements.

2



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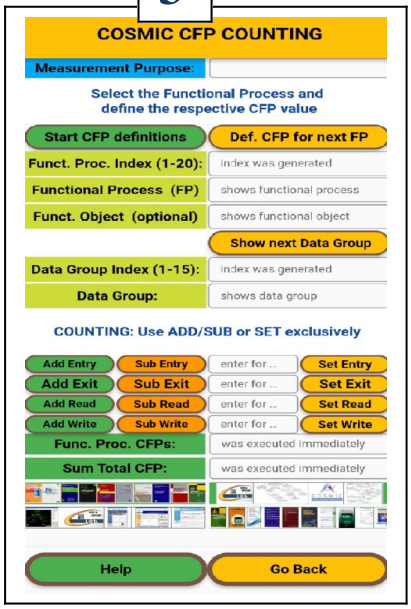

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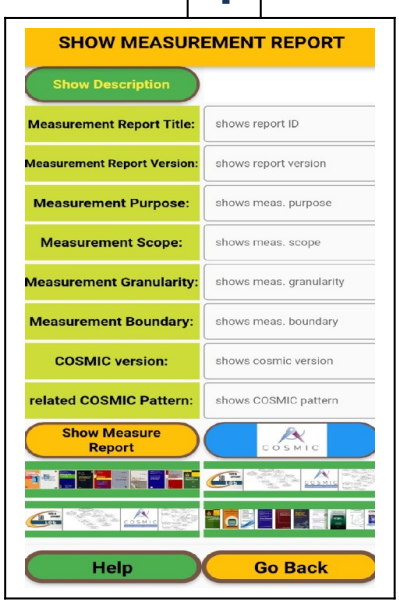
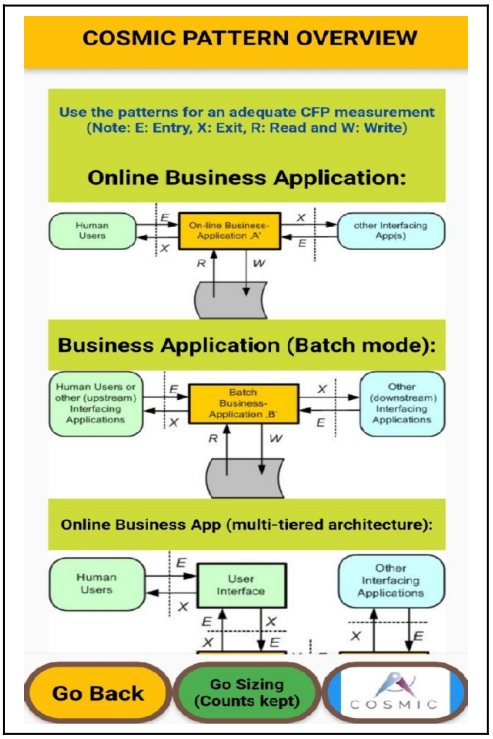
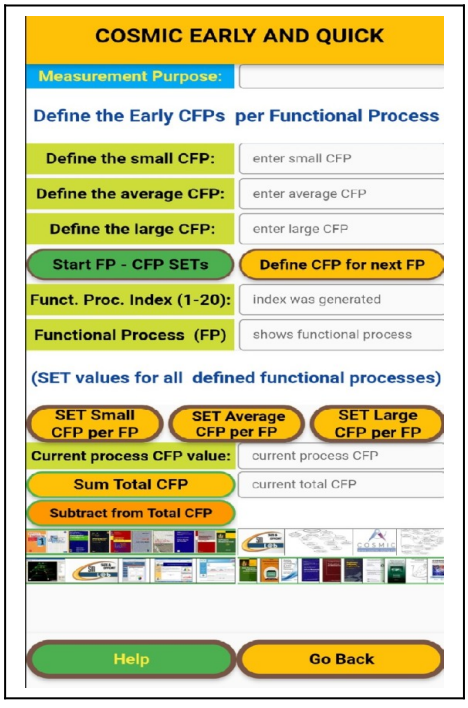


The ***COSMIC CFP Counting*** supports the size measurement based on the ***Entry, Exit, Read*** and ***Write*** metrics. The *Set buttons* help in the case of large metrics values.

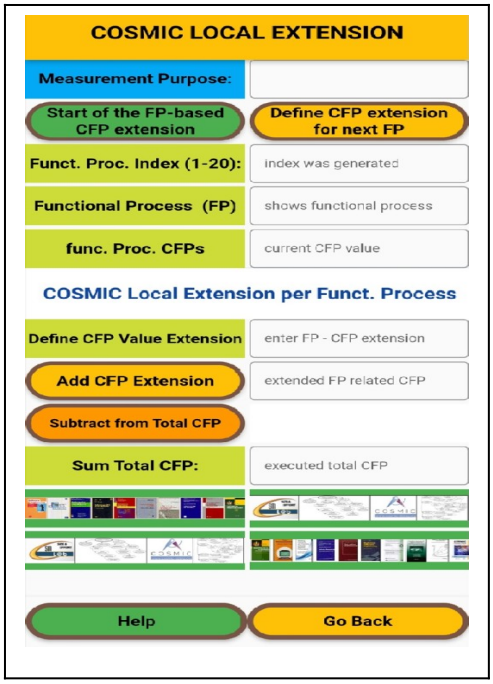
Every size measurement page have a ***Help*** button. The Help for counting includes an overview about the ***COSMIC patterns*** in order to support the COSMIC software model.



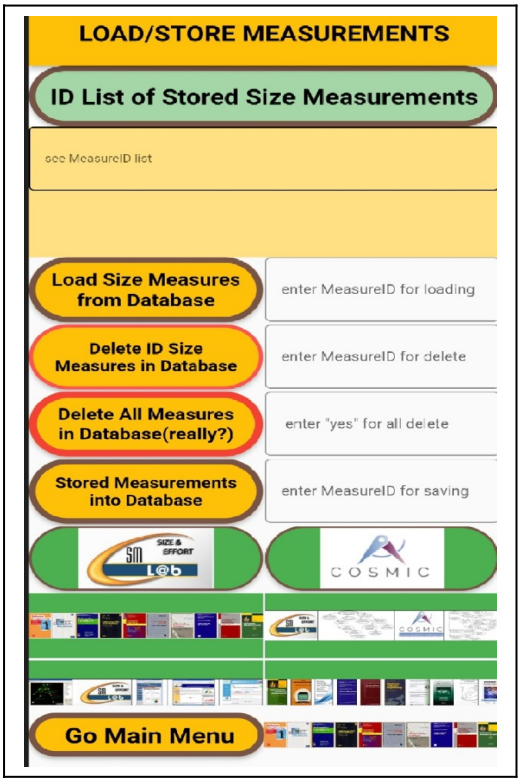
For faster CFP measurement, the ***COSMIC Early & Quick method*** can be used. Using this method, you define three classes of CFP values (on your own experience) and use it for counting/measurement for every functional process.

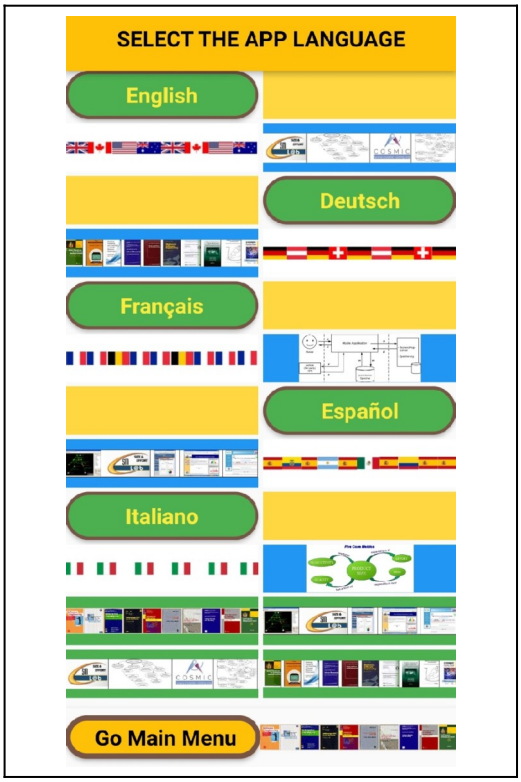


Furthermore, the ***COSMIC local extension method*** can be used in order to involve CFP values caused by a high functionality in the software system or application that would not be considered by the Entry, Exit, Read and Write COSMIC metrics. This allows the CFP value of each functional process to be adjusted.

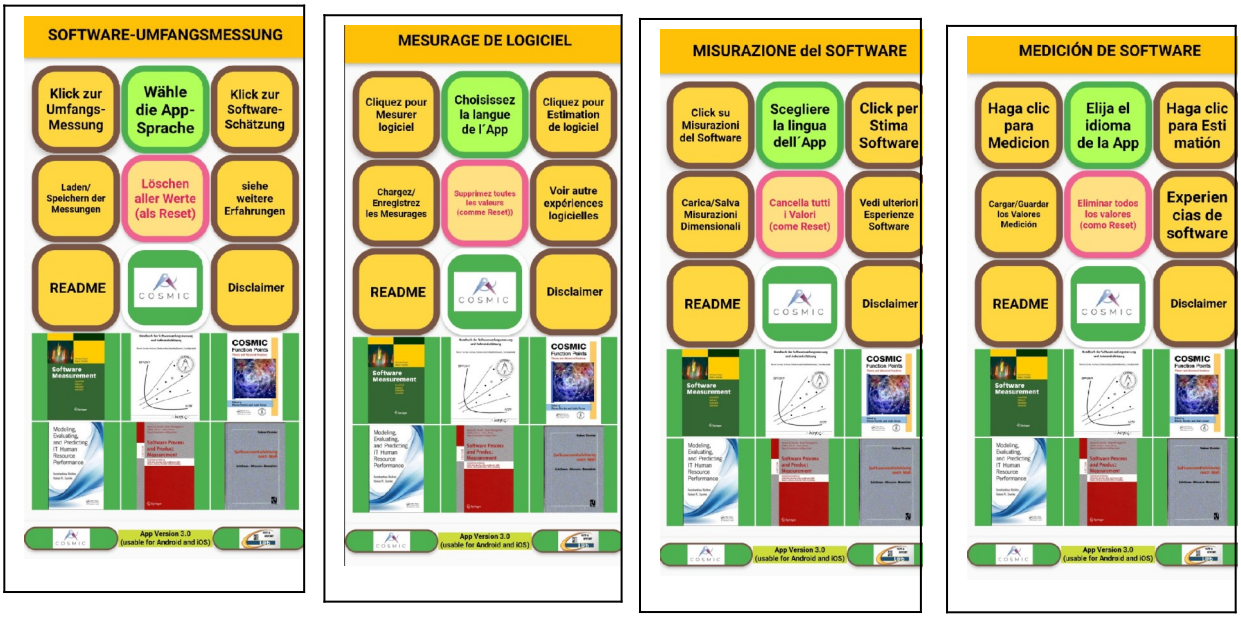


A COSMIC size measurement can be ***stored*** or ***loaded*** using the Load/Store button on the data base app facilities.





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

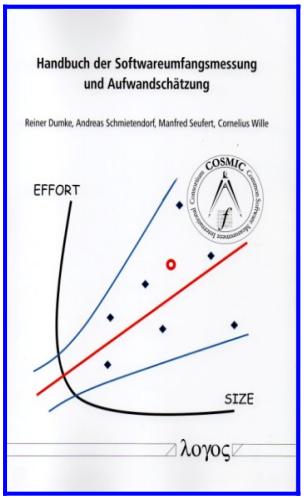
CRC Publ., Boca Raton, 2011 (334 p.) ISBN 978-1-4398-4486-1

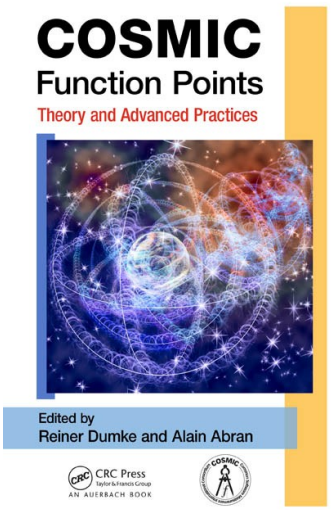
and

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.