

Volume

1

NOKIA 6100 - JAVA MIDP 1.0

MyStocks 1.0

Software User Guide

MYSTOCKS 1.0 FOR JAVA MIDP 1.0

Software User Guide

© Yves Coene, 2003-2004. All rights reserved.
yves.coene13@yucom.be

User Guide - Revision 1.0

TABLE OF CONTENTS

1.	INTRODUCTION	4
1.1	PURPOSE	4
1.2	SYSTEM REQUIREMENTS	4
1.3	REFERENCE DOCUMENTS	4
1.4	ABBREVIATIONS AND ACRONYMS	4
2.	GETTING STARTED.....	5
2.1	INSTALLING THE APPLICATION FILES.....	5
2.2	STARTING THE APPLICATION	5
3.	SCREENS.....	8
3.1	MAIN MENU.....	8
3.2	ROW VIEW	8
3.3	COLUMN VIEW.....	11
3.4	EDIT SCREEN	13
3.4.1	<i>Fixed Point</i>	13
3.4.2	<i>Date</i>	14
3.4.3	<i>String</i>	14
3.5	SETTINGS	15
3.6	SUMMARY	16
3.6.1	<i>Return Data</i>	16
3.6.2	<i>Asset Distribution</i>	17
3.6.3	<i>Geographical Distribution</i>	17
3.7	INSTRUCTIONS	18
3.8	ABOUT	18

TABLE OF FIGURES

Figure 1: Select applications in menu.....	5
Figure 2: Select list of applications	5
Figure 3: Initial screen of MyStocks application.....	6
Figure 4: Sample Data.csv file.....	6
Figure 5: Main menu.....	8
Figure 6: Row view (normal mode).....	9
Figure 7: Row view (search mode).....	9
Figure 8: Row view (no data)	11
Figure 9: Column view (normal mode)	12
Figure 10: Column view (search mode)	12
Figure 11: Column view (graphical mode).....	13
Figure 12: Edit view (fixed point)	13
Figure 13: Edit view (date)	14
Figure 14: Edit view (string).....	14
Figure 15: Settings menu	15
Figure 16: Set password screen	16
Figure 17: Return data	16
Figure 18: Asset distribution	17
Figure 19: Geographical distribution portfolio.....	17
Figure 20: Instructions screen.....	18
Figure 21: About screen.....	18

1. INTRODUCTION

1.1 Purpose

This document is the User Guide of the MyStocks application for Nokia 6100 (Series 40). This application is freeware, and is provided as-is and without any warranty. The author is not responsible for any damage to your data or errors the application may contain.

MyStocks allows keeping track of the value of a portfolio of mutual funds and stocks by entering their current value. No communication with the Internet is needed. The application computes return on investment, internal rate of return per stock and for the whole portfolio. It can also represent the asset mix and geographical distribution of your stocks as a pie chart.

The application is written in Java MIDP 1.0, and is therefore portable to most Java-enabled mobile devices.

1.2 System Requirements

Although the application was developed for a Nokia 6100 mobile device, it may also work on other devices with the following minimal characteristics:

- Java MIDP 1.0
- Screen resolution 128x128
- Midlet size approximately 25 Kb.

If you are using this application on a different device, send me an email then I can update the User Guide.

1.3 Reference Documents

[1] N/A.

1.4 Abbreviations and Acronyms

CSV	Comma Separated Values
IRR	Internal Rate of Return
LSK	Left Soft Key
Qty	Quantity
ROI	Return on Investment
RSK	Right Soft Key
YTD	Year to Date

2. GETTING STARTED

2.1 Installing the Application Files

You should install the files MyStocks.jad and MyStocks.jar file on your mobile device. This can be done in several ways:

- Via an Infra-red (IR) connection between your mobile phone and PC,
- Via a USB data cable between your mobile phone and PC (e.g. Nokia adapter cable DKU-5 or MobileAction USB data cable MA-8620E),
- Over the Air (OTA) delivery.

The explanation on how to install a Java MIDlet on a mobile device is beyond the scope of this User Guide.

2.2 Starting the Application

Use the menu to scroll to “Applications” and “Select” with the LSB.



Figure 1: Select applications in menu

Select “MyStocks” from the list of Applications installed on your device.



Figure 2: Select list of applications

The first time you start the application, the default currency is set to “EUR”, no password is defined and the initial screen (See 3.1) is immediately displayed.



Figure 3: Initial screen of MyStocks application

When the MyStocks application starts, it checks whether stock data is already stored in the phone's record store. If not, the stock data is initialised with the data from the data.csv file which is included in the MyStocks.jar file. If stock data is found in the record store, this data is read instead.



You can replace the data.csv file in the MyStocks.jar file with other data. This avoids you having to enter your portfolio data via the phone's keypad. You can use a regular text editor and WinZip on your PC to do this. Don't forget to also update the size of the .jar file in the .jad file before downloading the updated files on your phone.

To reduce the size of the midlet, you can also remove the data.csv file from the .jar file.

The data.csv file has a simple Comma Separated Values (CSV) format, where each line represents a stock position. An example file is shown below.

```
01/03/2003,0,USD/EUR,USD,1.2630,1.2630,1.3020
02/08/1998,45,Nokia,EUR,33.50,40.28,37.00,1,0,1
27/02/1997,30,Dell,EUR,39.00,40.78,41.50,1,0,0,0,1
04/02/2001,35,Bayer,EUR,38.32,29.89,40.73,1,0,1
17/04/1998,20,IBM,USD,90.00,100.00,105.00,1,0,0,0,1,0
20/04/2000,90,Aegon,EUR,18.05,18.55,18.76,1,0,1
26/01/2000,50.000,Eq. Eur,EUR,66.80,55.31,59.10,0.5,0.5,0.5
```

Figure 4: Sample Data.csv file

The columns in the data.csv file contain the following information:

<i>Column</i>	<i>Description</i>	<i>Default</i>	<i>Example</i>
1	Purchase date		17/04/1998
2	Number of shares (can be a fixed point number)		20
3	Stock or mutual fund name		IBM

4	Currency identifier (ISO symbol), e.g. EUR, USD, JPY etc.		USD
5	Unit cost in default currency		90.00
6	Price at reference date (1 st January of current year) in currency for this stock (USD).		100.00
7	Most recent stock price in currency for this stock (USD).		105
8	Percentage of stock. E.g. mutual funds may contain e.g. 75% stocks and 25% bonds. This value would then be 0.75.	1	1.0
9	Percentage of bonds	0	0.0
10	Percentage of European stocks	1	0
11	Percentage of U.S. stocks	0	1
12	Percentage of Japanese stocks	0	0

Columns 8 to 12 are optional. If they are omitted, the default values indicated in the table above are used instead.

3. SCREENS

3.1 Main Menu

This is the screen which is displayed when the application is started and when (optionally) a correct password has been entered.



Figure 5: Main menu

The Main menu gives access to the commands below:

Commands	Description	Section
Select (LSK)	Selects highlighted menu command	
Exit (RSK)	Exits MyStocks application	
Browse	Displays Row View	3.2
Find	Displays Column View in “Search Mode”	3.3
Settings	Allows changing various settings, e.g. default currency, password etc.	3.5
Summary	Computes value of portfolio and various indicators, e.g. change YTD, ROI, etc.	3.6
Assets	Visualises asset allocation of complete portfolio	3.6.2
Instructions	Displays instruction summary	3.7
About	Displays application name and version number	3.8

3.2 Row View

The “Row View” displays two columns. Column 1 gives the name of the stock (or mutual fund) and Column two shows the value of the “property” the name of which is shown on the first line. You can view the other properties/columns by scrolling horizontally. You can view all stocks by scrolling vertically. A horizontal and vertical scrollbar indicate the relative position of the selected cell in the “virtual spreadsheet”. Use the “Send” key to switch rows and columns without changing the selected cell.

The stocks are initially sorted by name.

	Last
Aegon	18.76
Bayer	40.73
Dell	41.50
Eq. Eur	59.10
IBM	105.00
Nokia	37.00
USD/EUR	1.30

Options Back

Figure 6: Row view (normal mode)

The following colour coding is used:

<i>Item</i>	<i>Colour</i>	<i>Meaning</i>
Stock name	blue	Data updated in last 24 hours
Stock name	black	Not updated in last 24 hours
Value - last	red	If % change YTD is negative

The ^-key allows displaying a search box at the bottom of the screen. You can type (part of) a stock name in the search box to select the stock matching the search string. This is particularly useful when not all stocks fit on a single screen. Using the ^-key again hides the search box.

	Last
Aegon	18.76
Bayer	40.73
Dell	41.50
Eq. Eur	59.10
IBM	105.00
Nokia	37.00
USD/EUR	1.30

Find: n

Options Clear

Figure 7: Row view (search mode)

You can use the following keys in this view.

<i>Key</i>	<i>Description</i>	<i>Section</i>
Send key	Switch back and forward between Row and Column View	3.3
^-key	Switch to/from "Find Mode"	Figure 7
keypad	Edit value of current selection.	3.4
Scroll left/right	Select different column (i.e. property). The available columns are listed in the table below.	

Scroll up/down	Select different row (i.e. stock).	
----------------	------------------------------------	--

The following stock properties are available as separate columns. Columns marked with (*) are read-only.

<i>Column</i>	<i>Title</i>	<i>Description</i>	<i>Type</i>	<i>Example</i>
1		Stock or mutual fund name	String	IBM
2	Last	Most recent stock price in currency for this stock in currency for this stock (column 13)	Number	105.00
3*	YTD	% change since 1 st of January (i.e. reference date)	Percentage	
4*	ROI	% change since purchase expressed in default currency	Percentage	
5*	Value	<i>Last</i> * <i>Qty</i> expressed in default currency	Number	
6*	IRR	Internal rate of return in default currency	Percentage	
7*	Weight	<i>Value</i> / total value portfolio	Percentage	
8	Cost	Unit cost in default currency	Number	90.00
9	1 Jan	Price at reference date (1 st January of current year) in currency for this stock (USD).		100.00
10	Purchase	Purchase date	Date	17/04/1998
11	Last	Date when “last” (column 2) was last updated.	Date	17/05/2001
12	Qty	Number of shares (can be a fixed point number)	Number	20
13	Currency	Currency identifier (ISO symbol), e.g. EUR, USD, JPY etc.	String	USD
14	Equity	Percentage of stocks. E.g. mutual funds may contain e.g. 75% stocks and 25% bonds. This value would then be 0.75.	Percentage	100%
15	Bonds	Percentage of bonds	Percentage	25%
16	Eq. Eur	Percentage of European stocks	Percentage	100%
17	Eq. US	Percentage of U.S. stocks	Percentage	0%
18	Eq. Japan	Percentage of Japanese stocks	Percentage	0%

In the “Row view”, the following commands are available:

<i>Commands</i>	<i>Description</i>	<i>Section</i>
Options (LSK)	Show options menu	

Back (RSK)	Back to Main menu	3.1
Edit	Edit selected value (column 2). Not shown if selected value is a computed value.	3.4
Edit Name	Edit selected stock name (column 1)	3.4
Details	Switch to Column View	3.3
Delete	Remove selected entry from list of stocks	
Delete all	Remove all entries from list of stocks, after confirmation.	
Sort	Sort entries based on value (column 2). To sort on a different column, first scroll to this column to make it visible and then select the “Sort” command. Note that sort order is not saved.	
New	Enter name of new stock or mutual fund. The new stock is initialised with the following default data: <ul style="list-style-type: none"> • Percentage stocks 100%, • Percentage European stocks 100%, • Currency is set to “default currency”, • Dates are set to 1/1/1970, • All other values: 0. 	

If the portfolio contains no stocks (see Figure 8), then only the “New” and “back” commands are available.



Figure 8: Row view (no data)

3.3 Column View

The “Column View” displays two columns. Column 1 gives the properties of the stock (or mutual fund) and Column two shows the value of that “property” for the stock the name of which is shown on the first line. You can view the other properties/columns by scrolling vertically. You can view all stocks by scrolling horizontally.



Figure 9: Column view (normal mode)

The ^-key allows displaying a search box at the bottom of the screen. You can type (part of) a stock name in the search box to display the stock matching the search string. Using the ^-key again hides the search box.



Figure 10: Column view (search mode)

You can use the left/right cursor keys to move from one stock to the next or previous.

Key	Description	Section
Send key	Switch to Row View	3.2
*-key	Show/hide Geographical distribution for current selection. You can use the left/right cursor keys to move from one stock to the next or previous even when the graph is displayed.	Figure 11
^-key	Switch to/from "Search Mode"	Figure 7
keypad	Edit value of current selection.	3.4
Scroll left/right	Select different stock.	
Scroll up/down	Select different property. See section 3.2 for list of available properties.	



Figure 11: Column view (graphical mode)

In the “Column view”, the following commands are available:

<i>Commands</i>	<i>Description</i>	<i>Section</i>
Options (LSK)	Show options menu	
Back (RSK)	Back to Main menu	3.1
Edit	Edit selected value (column 2). Not shown if selected value is a computed value.	3.4
Edit Name	Edit selected stock name (column 1)	3.4
Delete	Remove selected entry from list of stocks	
New	Enter name of new stock or mutual fund.	

3.4 Edit Screen

The Edit View allows entering a new value. It is accessible from the Row and Column View via the Edit command or when you start typing the new data for the current cell.

3.4.1 Fixed Point

You can also type a digit when a modifiable cell is selected to access this screen. By clicking “OK”, you return to the previous screen and the value is updated with the value you entered in the edit field.



Figure 12: Edit view (fixed point)

Note that numerical data is stored in fixed point format with maximum 4 decimal digits. When entering or editing percentages, you can enter them as “75%” or “0.75”.

<i>Key</i>	<i>Description</i>	<i>Section</i>
Left/right	Move cursor in edit fields	
keypad	Enter digit	
^_-key or #-key	Enter decimal point	
Clear (RSK)	Removes digit to left of current cursor position	
Back (RSK)	Cancel editing and returns to previous screen	
OK (LSK)	Completes editing and returns to previous screen	

3.4.2 Date

When the current field is a modifiable date, you can change it using the screen below.



Figure 13: Edit view (date)

3.4.3 String

When the current field is a modifiable string, you can change it using the screen below. It is used to edit stock names and currency names.



Figure 14: Edit view (string)



Currency names are case-sensitive. If you enter a currency name which is not recognised (e.g. Eur instead of EUR), the “total” value of the stock may be 0. Note that a currency name XXX is only valid if it is identical to the default currency, or can be found in the list of stocks as “XXX/YYY”

3.5 Settings

The Settings screen allows setting various application settings which are stored on the mobile device.



Figure 15: Settings menu

Most of these commands are self-explaining.

<i>Commands</i>	<i>Description</i>
Set currency	Allows to change the reference currency, e.g. XXX. This currency is used to compute total values, returns etc. The value of a stock quoted in USD is computed by dividing its value in USD by the value of the “stock” named “USD/XXX” which should be included in the current stock list. After installation, the reference currency is set to “EUR”.
Set font	Allows changing the font used in some of the screens.
Set baseline	Copies the last available value and corresponding date to the reference value and date. This function is intended to keep the data corresponding to the 31 st of December of the previous year to be able to compute YTD-changes. You have to confirm this command before it will be applied. After installation, the initial baseline values are read from the data.csv file included in the MyStocks.jar file.
Set password	Allows defining a password which will be asked at application startup. To verify the password, you have to confirm it by entering it a second time (See Figure 16). When the password is defined as an empty string, it will not be asked at startup. After installation, the password is not set.



Figure 16: Set password screen

3.6 Summary

The application provides a summary of all stock data in the following 3 screens.

3.6.1 Return Data

The page shows the following textual summary information:

- EUR: Reference currency. The reference currency can be changed via the Settings screen (See section 3.5).
- YTD: Return since beginning of the year (i.e. reference date) in percentage (4.86%) and in reference currency (491.17 EUR),
- ROI: Return on investment (ROI) since purchase date in percentage (-1.77%) and in reference currency (-191.34 EUR),
- Last portfolio value in reference currency (10591.85),
- Value portfolio at beginning of the year (10100.68),
- Total cost portfolio (10783.20)



Figure 17: Return data

The two other “summary” screens: Asset distribution (Figure 18) and Geographical distribution (Figure 19) are accessible via the vertical scroll buttons as the vertical scroll bar indicates.

3.6.2 Asset Distribution

This summary view is selected via the "Assets" menu item on the main menu. The percentages are computed from the "% stocks" and "% bonds" fields of each individual stock or mutual fund and the most recent value using the reference currency.



Figure 18: Asset distribution

The pie chart may contain 3 slices:

- Equities (Red)
- Bonds (Green)
- Other assets (Blue)

3.6.3 Geographical Distribution

This summary view is accessible by selecting the "Assets" menu item on the main menu, and scrolling one page down.



Figure 19: Geographical distribution portfolio

A similar page is available for each individual stock or mutual fund via the Column View and the "*" key as explained in section 3.3.

The pie chart may contain 5 slices:

- European equities (Red)
- US equities (Green)
- Japanese equities (Blue)
- Other equities (Yellow)
- Bonds and other assets (White)

3.7 Instructions

Brief instructions for commands which are not self-explaining are available via the “Instructions screen”.

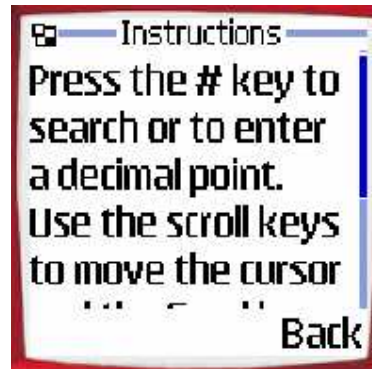


Figure 20: Instructions screen

3.8 About

The “About screen” displays the application name and the application version number.



Figure 21: About screen

