

Solitaire_English

Rune Johnsrud

COLLABORATORS

	<i>TITLE :</i> Solitaire_English		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY	Rune Johnsrud	June 25, 2022	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

1 Solitaire_English	1
1.1 Solitaire English Guide	1
1.2 Getting Started	2
1.3 Troubleshooting & Errors	3
1.4 Error 1	4
1.5 Error 2	4
1.6 Error 3	4
1.7 Error 4	5
1.8 Error 5	5
1.9 Error 6	5
1.10 Error 7	5
1.11 Error 8	6
1.12 Problem 1	6
1.13 Problem 2	6
1.14 Problem 1	7
1.15 Solitaire Bugs	7
1.16 Main Game Screen	8
1.17 Solitaire Menus	9
1.18 Project / New Game...	9
1.19 Project / Pause...	10
1.20 Project / About...	10
1.21 Project / Quit...	10
1.22 Function / Prefs...	10
1.23 Function / Cards...	11
1.24 Function / Statistics...	11
1.25 Function / High-Scores...	11
1.26 Special / Undo...	11
1.27 Solitaire Windows	11
1.28 Prefs Window	12
1.29 Cards Window	15

1.30	Statistics Window	16
1.31	High-Scores Window	16
1.32	How to play Solitaire	17
1.33	How to play Solitaire	17
1.34	How to play this version of Solitaire	17
1.35	Copyright notice	17
1.36	About Solitaire	18
1.37	Future plans	19
1.38	item_credits	19
1.39	About the author of Solitaire	20
1.40	Solitaire History	21
1.41	Index	22

Chapter 1

Solitaire_English

1.1 Solitaire English Guide

Solitaire V1.03 Documentation

In this Solitaire release the AmigaGuide docs are not quite finished!! The sections on "How to Play Solitaire" are not finished, and the "Index" page is not finished either. Some of the hypertext links are also missing. The reason for this is that writing the AmigaGuide doc simply took too much time..

Copyright

- Copyright notice

Getting started

- Read this for quick installation

Troubleshooting

- Describes errors and problems

Bugs

- "Bugs" in Solitaire

How to Play

- The game rules, and how to play it

Menus

- Description of individual menu items

Main Game Screen

- Description of main game screen

Windows

- Description of the different windows

About
- About Solitaire

History...
- Solitaire release history

Future Plans
- Things to come...

Credits
- 8)

Index
- Complete index

1.2 Getting Started

Getting started

To be able to play Solitaire, you will need:

- * One (or more) Amiga(s) (!)
- * A M68020 processor (or higher),
- * At least Kickstart V3.0 (V39) (or higer),
- * And an AGA machine (A1200/A4000(-030/-040)/CD32???)

But if you are a developer, you should be able to play the game as long as you have a 68020 or better, KS 3.0, and you use a HIRES|LACED Workbench.....

The complete solitaire archive should consist of these files:

ReadMe.txt	- Quick info
ReadMe.txt.info	- Icon for readme file
Solitaire	- Main Program
Solitaire.info	- Icon for Solitaire
Solitaire.prefs	- Prefs settings
Solitaire.guide	- AmigaGuide hypertext doc for Solitaire
Solitaire.guide.info	- Icon for the hypertext doc
doritos/16	- The font itself
doritos.font	- The font description file

To install the program, just copy:

- * Solitaire, Solitaire.info, Solitaire.prefs
(OPTIONAL: Solitaire.guide, Solitaire.guide.info)

to the desired directory, and then copy:

```
* Doritos/16, Doritos.font
```

to your fonts directory.

You don't have to use the font which comes with this program, it uses Topaz/8 if it doesn't find the supplied font. But I really recommend that you use it, because it generally looks nicer if you do.

If you have problems getting started, look at the
Troubleshooting
section.

1.3 Troubleshooting & Errors

Troubleshooting & Errors

This section describes errors(/error messages), and how to solve problems that may arise during installation or use of this program.

This list shows all the error messages generated by Solitaire:

```
Error 1
- Couldn't open xxx.library V39

Error 2
- Couldn't open fonts

Error 3
- Couldn't allocate asl requester

Error 4
- Couldn't open window/screen

Error 5
- Couldn't initialize gadgets/menus

Error 6
- Couldn't initialize game

Error 7
- Couldn't lock default public screen

Error 8
- Couldn't open solitaire.prefs file
```

This list shows some of the common problems that you may encounter:

- Problem 1
- Solitaire allways opens on a PRODUCTIVITY screen
- Problem 2
- Solitaire uses Topaz/8 as the screenfont
- Problem 3
- Solitaire doesn't use my config

1.4 Error 1

Error 1

Q: You get the errormessage "Couldn't open xxx.library V39".

A: Either you don't have kickstart V39, or you dont't have the required libraries.

This version of Solitaire uses the following libraries:

```
exec.library      (V39+)
dos.library       (V39+)
layers.library    (V39+)
intuition.library (V39+)
graphics.library (V39+)
gadtools.library (V39+)
diskfont.library (V39+)
```

1.5 Error 2

Error 2

Q: You get the errormessage "Couldn't open fonts".

A: Solitaire first tries to open it's own font (Doritos/16), if this fails it tries to open the ROM-font Topaz/8. Failing that, it exits.

If this error occurs (it really NEVER should), you have to write to me and tell me how you made it occur. 8^P

1.6 Error 3

Error 3

Q: You get the errormessage "Couldn't allocate asl requester".

A: You are probably out of memory, free some and try again.
This errormessage should not normally appear.

1.7 Error 4

Error 4

Q: You get the errormessage "Couldn't open window/screen".

A: You are probably out of memory, free some and try again.
It is also possible that the required monitor driver is missing,
Solitaire tries to open an "MULTISCAN:Productivity" screen if it
has to.

The "OpenScreen failed" error message, also contains a secondary error
message which tells in more detail what went wrong.
Read this carefully, then try fixing the problem and try again.

1.8 Error 5

Error 5

Q: You get the errormessage "Couldn't initialize gadgets/menus".

A: You are probably out of memory, free some and try again.
This errormessage should not normally appear.

1.9 Error 6

Error 6

Q: You get the errormessage "Couldn't initialize game".

A: You are probably out of memory, free some and try again.
This error message also contains a secondary error message
which tells more about what went wrong.

1.10 Error 7

Error 7

Q: You get the errormessage "Couldn't lock default public screen".

A: Solitaire tries to clone your Workbench screen or default public screen, as long as it's dimensions are acceptable. So if Solitaire doesn't find a default public screen it fails to start. Try to re-open your Workbench screen, or make a screen the default public screen, and try to start the program again.

1.11 Error 8

Error 8

Q: You get the errormessage "Couldn't open solitaire.prefs file".

A: At startup time, solitaire tries to read a .prefs file from the directory it was started from. If the .prefs file does not exist or you started solitaire from another directory, it will display this message.

If you don't have a .prefs file, start solitaire, enter the prefs window, and press the save button.

If you started solitaire from a different directory than the executable resides in, try starting it from the directory which contains the executable.

1.12 Problem 1

Problem 1 - Solitaire always opens on a PRODUCTIVITY screen

At startup time Solitaire tries to lock the default public screen, to duplicate it's properties. If there is no default public screen, or the default public screen is smaller than: 640*460, Solitaire opens it's own screen. In this version of Solitaire, a VGA-PRODUCTIVITY screen is used if it cannot clone the default public screen. This might change in the future...

1.13 Problem 2

Problem 2 - Solitaire uses Topaz/8 as the screenfont

The supplied font (Doritos/16) should reside in your fonts: directory, (or any other font: assigns), if it doesn't Solitaire uses Topaz/8.

Solitaire opens a FPB_DESIGNED font (looks nicer that way!), so it will always fail if the correct font file isn't present.

If the font file wasn't included in the archive you got, please try to get a complete archive...

Solitaire is not "really" font sensitive, so the gadget placements and sizes are hard-coded. So using Topaz/8 may not look nice, but it will work.

Some day Solitaire MAY become a font-sensitive program...
(I'll just have to code some really nice GUI routines first,
OR wait for Kick 4.0!!...8)

1.14 Problem 1

Problem 3 - Solitaire doesn't use my config

The config file that Solitaire reads at startup time, must reside in the directory that contains the main executable. The current directory must also be the directory that contains the main program (Solitaire).

If, upon startup, some of these conditions aren't met, or the .prefs file is missing, Solitaire will produce an error message

Error 8

.

1.15 Solitaire Bugs

Solitaire Bugs

This program should be mostly free from major bugs and quirks. But because of the size and complexity of this program, there are a few things that I have left unfixed. Either because I just wasn't able to fix the problem (in this version), or it was of such character that it wasn't really a "bug". Anyway, none of the "bugs" should affect anything in a serious manner.

This program has been developed and tested with the use of the "Enforcer" debug-tool. It has been tested thoroughly on the following machine configurations:

- * A4000-040 (/1952) - Standard config + 100Mb extra HD
- * A4000-030 (/1942) - Standard config
- * A1200 (/1940) - Standard config (with HD).

This program has also been tested under extreme conditions like:

- * Low memory (CHIP and FAST),

- * Started on A500 (KS 1.2),
- * the most commonly used WB screen configurations,
- * wrong versions of several libraries etc...

This program should also free ALL resources and memory when exited.

But there are still a few things that needs fixing.
Here is a quick summation of the "bugs" that I know to exist:

If you use LARGE fonts (bigger than 20-30 pixels) as your "Screen Text", some of the card-graphics or gadgets may get trashed.

Sometimes, when selecting "Save" in the
Card Prefs
window,
it will redraw all the cards, even if you did not choose a new image.

1.16 Main Game Screen

The Main Game Screen

The main game screen is the main playing area. This is where the game is played. For more game playing details, read Playing Solitaire .

Here is a list of all gadgets that this window contains, and a description of what they do (The list format is: "GADGET_TITLE - [gadget_type:]").

From left to right:

Buttons:

? - [button]:

Pressing this gadget brings up the
Prefs Window

Information gadgets:

Player Name - [textbox]:

Shows the current player name.

Game Type - [textbox]:

Displays the current Game Type .

Score - [numeric]:

!!! NOT YET IMPLEMENTED !!!

Time - [textbox]:

!!! NOT YET IMPLEMENTED !!!

1.17 Solitaire Menus

```

                Solitaire Menus
*****

Project          Function          Special

                New Game...

                Prefs...

                Undo...

                Pause...

                Cards...

                -----
                -----

                About...

                Statistics...

                -----

                High-Scores...

                Quit...

```

1.18 Project / New Game...

New Game... [R Amiga N]

This menu-item allows you to start a new game. The deck is re-shuffled, and all your game statistics (score, time etc.) will be reset, except if you are playing the "Vegas" game type.

Upon choosing this menu-item, a requester will pop up asking if you really want a "New Game". Choosing "No" will allow you to continue with the old game, choosing "Yes", will start a new game.

1.19 Project / Pause...

Pause... [R Amiga !]

If you are playing a "-Timed" or "-Timed with Score" game, this will temporarily stop the game timer (clock), until you choose "Continue" from the requester that pops up.

This will prevent the internal timer from running without you playing, and this again prevents your game score from decreasing.

!!! NOT YET IMPLEMENTED !!!

1.20 Project / About...

About... [R Amiga ?]

Upon selecting this menu-item, a requester will pop up. This requester will contain information about the game itself like f.ex:

- * The current version number
- * Compile date (Well, almost....)
- * The authors name (that's me folks), address (I like fan mail!), etc...

1.21 Project / Quit...

Quit... [R Amiga Q]

Selecting this menu-item will bring up a requester that asks if you want to "Quit Solitaire". Selecting "No", allows you to continue playing, selecting "Yes", quits the game.

(And upon selecting "Yes", you free LOTS of waisted memory & resources! :-P)

1.22 Function / Prefs...

Prefs... [R Amiga P]

Upon selecting this menu item, a window will pop up that allows you to change a lot of different stuff in the game/gameplay..

Read

Prefs Window
for more presise info.

1.23 Function / Cards...

Cards... [R Amiga C]

Upon selecting this menu item, a window will pop up that allows you to change the look of the cards.

Read

Cards Window
for more presise info.

1.24 Function / Statistics...

Statistics... [R Amiga S]

Upon selecting this menu item, a window will pop up that shows some info about your current game status.

Read

Statistics Window
for more presise info.

1.25 Function / High-Scores...

High Scores... [R Amiga H]

!!! NOT YET IMPLEMENTED !!!

1.26 Special / Undo...

Undo... [R Amiga U]

Selecting this menu items, allows you to undo your last Move

1.27 Solitaire Windows

Solitaire Windows

Solitaire has four additional windows (in addition to the main play area). These windows can be brought up either by selecting

them from the

Menu
, or by using keyboard shortcuts.

The

Prefs
window can also be brought up by pressing the ? gadget
at the bottom of the main window.

Prefs
- This window allows you to change game parameters

Cards
- Allows you to change the look of the cards

Statistics
- Shows some info about your current game status

High-Scores
- !!! NOT YET IMPLEMENTED !!!

1.28 Prefs Window

Prefs Window

Here is a list of all buttons/sliders/checkboxes/stringboxes/cycle gadgets that this window contains, and a description of how they work and what they do (The list format is: "GADGET_TITLE - [gadget_type]:"):

General gadgets:

Name - [stringbox]:

This gadget allows you to enter your name, it can be a maximum of 32 characters in length. If you select Save/Use, the Name textbox on the main screen will be updated to contain the new name.

In this version of Solitaire the name is not really useful, but when the high score option is implemented, it will be!

Level - [cycle]:

There are to "Game Levels" in Solitaire in this version, they are:

"Easy" and "Hard". (Read the

Gameplay

section for further info on gametypes).

If the selection you made is different than the initial setting, Solitaire will start a

New Game

.

Game configuration gadgets:

Shuffle - [slider]:

The slider value is used to determine the number of times the Cards are shuffled before they're dealt.

The slider range is: 1 (min) <-> 50 (max).

Warning Requester(s) - [checkbox]:

Checked....: Solitaire will put up requesters every time you do something illegal.

Not Checked: Solitaire will only put up requesters that's really necessary.

Warning Beep - [checkbox]:

Checked....: You will get a DisplayBeep() each time you do something wrong/illegal.

Not Checked: DisplayBeep() is only used when necessary.

Extended Drop Field - [checkbox]:

Checked....: With this option enabled, you can drop cards at any position below the stack you want to put them on, and if the cards are of the the "right type" they will end up in that stack.

Not Checked: This only allows you to drop cards at the stack, or else the cards are put back in the source stack.

PS! Try this one out, it's really not that easy to explain how it works!!

Cheat Mode - [checkbox]:

Checked....: Allows you to CHEAT (nifty huh!)

Not Checked: Doesn't allow you to CHEAT (now isn't that unfair!)

I really can't tell you any more about this function, that would really spoil all the fun!

UnDo - [checkbox]:

Checked....: With this function, you can undo your last move.

A move is: Moving (a) card(s), Turning a card,
Get new cards from the Shuffe Stack , @ { "Double Clicking " link ←
item_?3}.

Not Checked: No undo option available.

Since it's really easy to "UnDo" stuff, I could allow multiple undo levels in the future.

Animate End - [checkbox]:

Checked....: Shows a cool animation if you win!

Not Checked: Skips the animation when you have won a game.

High Scores - [checkbox]:

!!! NOT YET IMPLEMENTED !!!

Game-play configuration gadgets:

Draw - [slider]:

This slider indicates the number of times you can turn the Shuffle Stack .

The slider range is: 0 (infinite number of turns),
1 (turn stack one time) <-> 25 (turn stack 25 times).

Standard - [checkbox]:

!!! NOT YET IMPLEMENTED !!!

Vegas - [checkbox]:

!!! NOT YET IMPLEMENTED !!!

Timed - [checkbox]:

!!! NOT YET IMPLEMENTED !!!

Score - [checkbox]:

!!! NOT YET IMPLEMENTED !!!

Draw 1 / Draw 3 - [mx radio buttons]:

Selection "Draw 1": The number of cards that's skipped when you "press" the
Shuffle Stack , is set to 1.
I.e.: You pick 1 card at a time, allowing you to go
through every single card in the Shuffle Stack

Selection "Draw 3": The number of cards that's skipped when you "press" the
Shuffle Stack , is set to 3.
I.e.: You pick 3 cards at a time.

Action gadgets:

Save - [button]:

Saves the current settings to the "Solitaire.prefs" file, and uses the
selected options. (If you have changed something that requires Solitaire
to start a

New Game
, this will be done without warning!!)

Use - [button]:

Uses the current settings. (If you have changed something that requires
Solitaire to start a

New Game
, this will be done without warning!!)

Cancel - [button]:

Cancels all changes done, and returns to the old game.

If you are not shure if Solitaire will do something weird or not because of the settings you have chosen, use this button.

1.29 Cards Window

Cards Window

Here is a list of all buttons/sliders that this window contains, and a description of how they work and what they do.

(The list format is: "GADGET_TITLE - [gadget_type]:"):

Image gadgets:

Image 1..8 - [image-button]:

Pressing one of the image buttons, selects the image and updates the current image selection slider.

Image Selection gadgets:

Selected - [image-frame]:

This textbox shows the currently selected image.

Unnamed - [slider]:

This slider allows you to select a new card image.

Action gadgets:

Save - [button]:

Saves the current settings to the "Solitaire.prefs" file, and uses the selected options. If the selection you made is different than the initial settings, the cards will be redrawn.

Use - [button]:

Uses the current settings. If the selection you made is different than the initial settings, the cards will be redrawn.

Cancel - [button]:

Cancels all changes done, and returns to the old game.

1.30 Statistics Window

Statistics Window

Here is a list of all gadgets that this window contains, and a description of what they do. (The list format is: "GADGET_TITLE - [gadget_type]:"):

Information gadgets:

Player Name - [textbox]:

Shows the current player name.

Game Type - [textbox]:

Displays the current Game Type .

Moves - [numeric]:

Shows the number of Moves you have made (so far)

Cheats - [numeric]:

Shows the number of Cheats you have made (so far)

Draws - [numeric]:

Shows the number of Draws you have made (so far)

Time - [textbox]:

!!! NOT YET IMPLEMENTED !!!

Score - [numeric]:

!!! NOT YET IMPLEMENTED !!!

Action gadgets:

OK - [button]:

Exits the statistics window and returns to the game.

1.31 High-Scores Window

High-Scores Window

!!! NOT YET IMPLEMENTED !!!

1.32 How to play Solitaire

How to play Solitaire

If you haven't played Solitaire before, or there is something you don't understand in this version, read on!

How to play

- Read this if you haven't played Solitaire before

Solitaire

- Spc. stuff for his version of Solitaire

Expressions:

Game Type

Stack(s)

Move(s)

Cheat(s)

Draw(s)

Shuffle Stack

Draw Stack

1.33 How to play Solitaire

How to play Solitaire

The goal of this game, is to get all the 52 cards.....

1.34 How to play this version of Solitaire

How to play this version of Solitaire

1.35 Copyright notice

Copyright notice

The author of this program is in no way responsible for any damage caused by this software, what so ever.

This version of Solitaire is FREEWARE, so you can give it to anyone you want. It should be distributed as FreeWare, and anyone can include it in their PD library (or something similar), as long as they charge only a minor fee for copying, and as long as all the files in the archive accompany it (and the archive contents remains unchanged!!!).

Fred Fish is also allowed to include this program in his excellent PD library.

Computer magazines and other computer publications are NOT allowed to include it with their product without my written permission!!!!

Solitaire	- Main Program (English)
Solitaire.info	- Icon for Solitaire
Solitaire.guide	- AmigaGuide(tm) hypertext documentation (English)
Solitaire.guide.info	- Icon for the Solitaire.guide
doritos/16	- The font
doritos.font	- The font description file

All things mentioned above are:

(c) 1993 Rune Johnsrud / Amiga Freelancers.

Except the Doritos font, which is:

(c) 1993 Lars Hamre / Amiga Freelancers.

1.36 About Solitaire

About Solitaire

This implementaion of the card game Solitaire, was adapted from the PC version which is bundeled with Windows (c) Microsoft 3.0+. It is one of the best and most addictive "GUI" games I have ever played. But since I am no real PC fan (no offence), I just had to make a Amiga version that was at least as good as the Windows version.

To be able to to that, I had to get hold of a "REAL computer", so I bought a A4000-030. This is really the first computer I have ever had, which would enable me to write the "Ultimate Solitaire". (You really can't imagine how horrible it is to write programs on an diskbased A500!!!).

I decided to write this program in C, because it's really the best and simplest way to write system-friendly software. And since it demands that you at least have an A1200 (KickStart 3.0 & AGA-chipset), speed wasn't that important.

This version of solitaire was developed with:

- * SAS/C 6.2, SAS/C 6.3 (really the only choice..)
- * CygnusED V3.5
- * Toolmaker V1.19
- * DOPUS V4.01, DOPUS V4.10 (it really is the ultimate directory utility)
- * DeluxePaint V4.5, V4.6

Read the

Credits
section for further "information".

Read the

About me
section for further information about the author.

1.37 Future plans

Future plans

If I get any positive feedback, what so ever, I will probably continue to make this program better.

Here is a list of some of the future plans I have in mind:

- * Locale support
(Only if YOU will translate the locale files for me!)
- * Online AmigaGuide help
- * Solitaire in a Window on any public screen
- * Scaling of cards if window is sized
- * Userdefined IFF (brush) card images
- * Userdefined ANIM-BRUSH card backs
- * Game "recorder" (& playback - Allows playback of old games)
- * More different "game types"
- * I'll maybe even include different types of cardgames
- * Userdefinable fonts

I would appreciate it if you sent me suggestions (or bug reports).

Read the

About me
section to obtain my address.

1.38 item_credits

Credits

Spc thanks to:

- * Lars Hamre, who not only FORCED [:-)] me to make this game, but also gave me some good ideas, and coded the excellent "card move blit" routines, and not to forget: Helped me with the BOOPSI ImageGClass implementation. Keep up the good work (at SCALA).
- * Morten W. Lund.

I would really like to thank:

- * Stefan Becker for writing ToolManager (V2.1), without it I doubt that I'd ever written this program.
- * Martin Laubach for writing Arq.
- * All the guys at Commodore for making things like: The A4000, AGA, Kick & WB 3.0, Amiga Guide, bla, bla, bla....

It's really sad to see the ultimate Soft&Hardware team ever fall apart, just because the management didn't know how to market all the great products they made.

Thanks for making an effort....

Personal thanks to:

- * Anders, Kim, Henning (and his brother for making the greatest loudspeakers EVER!!!!) & Tor-Einar.
- * And not to forget Stig Johansen. His first ever credit in an Amiga program. (He is really a PC freak, the poor sod!)

With continuing inspiration from:

- * ELP, Genesis, Brand X, Marillion, King Crimson, Yes, Rush, Primus, Fish and all prog-rockers out there.

We are a dying breed.....

I hope you like this....

Rune Johnsrud / Author of Solitaire

1.39 About the author of Solitaire

About the author

I'm 19 years of age, and I have been using computers (Amiga/PC) since 1988. Since then I have studied electronics/computers for tree years, and later this year (1993/early 1994) I will join the army (I didn't volunteer!!).

I've written programs in BASIC, PASCAL (Amiga & PC) and Assembly laguage

until now. But when I bough my A4000, C seemed to be the "natural" choice.

Solitaire is one of my "first" C programs, and because of that it's not perfect. But one of my highest goals are to write system friendly and highly configurable programs, and I think that Solitaire has reached that goal.

Since Solitaire is the first program I have ever "released" to the general public, I would really appreciate some feedback.

You can drop me a few lines (or as many lines as you want), at this address:

Rune Johnsrud
Skogveien 16
2010 STRØMMEN
NORWAY

(Sorry, no EMAIL or BBS numbers).

1.40 Solitaire History

Solitaire History

V0.00 -> V0.74 - Internal releases

V0.75 - Solitaire V1.0a.
First general release, not spread to the public

V0.76 -> V0.80 - Internal releases (code optimizing)

V0.82 - Solitaire V1.01a.
Second general release, first version spread to the Amiga community.

V0.85 - Solitaire V1.02.
V1.01a wasn't as bug free as it should be, so it wasn't released.

In V1.02 several bugs and "known ??features??" has been removed. And finally we've got the BOOPSI stuff working. (It wasn't easy!!!)

This probably will be the last update of Solitaire in quite a while. (Unnless I get a lot of feedback...)

V0.86 - The same as V0.85, but the graphics are cleaned up a bit..

V0.87 - Solitaire V1.03
A few SMALL but irritating bugs have been removed, the graphics have been cleaned up yet again, the

main program is also a few kb smaller...

This WILL be the FIRST public release!!!!!!!!!!

1.41 Index

Index

This is a rather "In-Complete" index if you ask me, (but who would ask me! 8)
