

Quick, make me this app!



What is Spec?

- A framework to build Graphic User Interfaces
- In the spirit of Model View Presenter (but not exactly that)
- Declarative
- It supports different back-ends
 - Morphic
 - GTK3



Why desktop?

- Web applications are “hype”, and indeed they have some advantages (and drawbacks too).
- But desktop applications are here to stay: there are tons of use cases where they are suitable.
- Pharo supplies both (but we are going to talk about desktop here, web apps is the next talk) :)



Why GTK3?

- Full suite of UI elements + many libraries that we can reuse (Vte, WebKitGtk, etc.)
- Stable (more than 20yrs)
- Maintained (recently achieved 4th version)
- Portable (even if developed with Linux in mind)



Pharo Launcher



New

Default



Launch



Basic lau...



From disk



Import



Refresh



Show



Delete



VMs



Settings



About



Quit

Enter image name filter ...

Name	Architecture	Pharo Version	Last modified
Pharo 10.0 - 64bit (development version, latest)	64	100	1 months ago
moose-layouts	64	90	4 months ago
moose	64	90	4 months ago
p10ci	64	100	7 months ago
test3	64	90	7 months ago
test2	64	90	7 months ago
test1	64	90	7 months ago
test-gtk	64	90	7 months ago
zeroconf-p10	64	90	7 months ago
test-spec	64	90	8 months ago

Pharo 10.0 - 64bit (development version, latest) image, last edited 2022-01-24T21:17:36+01:00

Description

There is no description

Origin template

Pharo 10.0 - 64bit (development version, latest)

<https://files.pharo.org/image/100/latest-64.zip>

Initialization script

<none>

Location

/home/esteban/Pharo/images/Pharo 10.0 - 64bit (development version, latest)/Pharo 10.0 - 64bit (development version, latest).image



Theme Icon Browser

Contexts All

Actions	face-cool-symbolic
Animations	face-cool-symbolic.sy
Applications	face-crying
Categories	face-crying-symbolic
Devices	face-crying-symbolic.
Emblems	face-devilish
Emotes	face-devilish-symbolic
Legacy	face-devilish-symbolic
MimeTypes	face-embarrassed
Places	face-embarrassed-sy
Status	face-embarrassed-sy
UI	face-glasses
	face-glasses-symbolic
	face-glasses-symbolic
	Filter...

Theme Icon Browser

Contexts All

Actions	face-angry-symbolic.s
Animations	face-confused-symbc
Applications	face-confused-symbc
Categories	face-cool
Devices	face-cool-symbolic
Emblems	face-cool-symbolic.sy
Emotes	face-crying
Legacy	face-crying-symbolic
MimeTypes	face-crying-symbolic.
Places	face-devilish
Status	face-devilish-symbolic
UI	face-devilish-symbolic
	face-embarrassed
	face-embarrassed-sy
	Filter...








Debugger

1:stargen (active)	Address	Function	Variables	Breakpoints
	0x000055555555b9da	stargen		
	0x000055555555815b	main		

Number	Type	Addr	What
<input checked="" type="checkbox"/> 1	breakpoint	0x000055555555740a	in main at main.c:137
<input checked="" type="checkbox"/> 2	breakpoint	0x000055555555b97d	in stargen at stargen.c:1239

Break on Function

 Proceed
  Stop
  Step Into
  Step Over
  Return

```

1234
1235     int    flags_arg,
1236     int    out_format,
1237     int    graphic_format
1238 )
1239 {
1240     sun    sun          = {0.0, 0.0, 0.0, 0.0, 0.0, ""};
1241     long double min_mass = 0.4;
1242     long double inc_mass = 0.05;
1243 → long double max_mass = 2.35;
1244     int    system_count = 1;
1245     int    seed_increment = 1;
1246
1247     char   default_path[] = SUBDIR; /* OS specific ?
1248     char   default_out_path[] = "/dev/null";
  
```

```

1 gdb mi: 'next'. "step out"
2 gdb mi: 'step'. "step in"
3 gdb mi: 'continue'.
4
5 gdb mi: 'break'.
6 gdb cli: 'info breakpoints'.
7 gdb cli: 'x/100w 0x000055555555740a'.
8
9 gdb mi: '-break-list'.
10
11 gdb mi: 'help info breakpoints'.
12
13 gdb breakpoints
  
```

the disposition of the breakpoint after it gets hit. "dis" means that the breakpoint will be disabled. The "Address" and "What" columns indicate the address and file/line number respectively.

Convenience variable "\$_" and default examine address for "x" are set to the address of the last breakpoint listed unless the command is prefixed with "server".

Convenience variable "\$bpnum" contains the number of the last breakpoint set.





#ukraine

Updated: Not refreshed (17552 status)

#bigpharma

Updated: 2021-04-19 15:41 (15993 status)

#ukraine [updated Not refreshed, 17552 status]



```

1 query selectAll.
2
3 query select: [ :each | each userName matches: '.*menalahy.*' ].
4 query select: '/user/[screen_name re ".*gab99.*"]'.
5 query select: '/user/[screen_name re ".*menalahy.*"]'.
6

```

Created	User	Is Reply	Favorites	Retweets
2022-02-24 10:04	GeorgeB1394	false	0	57
2022-02-24 10:04	burayaneyazacaz	false	0	8
2022-02-24 10:04	VanshuKiid	false	0	81
2022-02-24 10:04	Wizard_of_Ouzo	false	0	1574
2022-02-24 10:04	BlaulichtRabu	false	0	0
2022-02-24 10:04	AmaiaOlmedo	false	0	1
2022-02-24 10:04	GenieQueen1	false	0	15002
2022-02-24 10:04	marcinbeds	false	0	2
2022-02-24 10:04	8r02s125558	false	0	2
2022-02-24 10:04	Ginmikol	false	0	547
2022-02-24 10:04	gnotnujuok	false	0	349
2022-02-24 10:04	BirgitdeFrance	false	0	36
2022-02-24 10:04	lfvillarroel	false	0	1

@BirgitdeFrance at: 2022-02-24 10:04



RT @BrefNewsFR: 🇺🇦🇷🇺 VIDÉO - La #Russie bombarde l'aéroport de Ivano-Frankivsk en #Ukraine.
 #UkraineRussie #WWIII <https://t.co/OxD6pcAYeE>



Nevermind Notes

Talks - abstracts
Today, 9:57 am

2022 (and beyond) in a bunch of slides
14 January 2022, 4:45 pm

Week 2021-12-6
6 December 2021, 8:49 am

Week 2021-11-29
1 December 2021, 6:23 am

116.203.154.183
29 November 2021, 2:28 pm

Week 2021-11-22
24 November 2021, 2:53 pm

Hi,
18 November 2021, 1:17 pm

Week 2021-11-15
18 November 2021, 8:31 am

Let's end this conflict
17 November 2021, 8:08 am

Since we were talking randomly, I prepar
16 November 2021, 3:06 pm

Week 2021-11-08
8 November 2021, 11:01 am

PhEPs (Pharo Enhancement Proposals)
26 October 2021, 11:55 am

Week 2021-10-25
26 October 2021, 9:24 am

PhEP 2 - Contribution Guidelines
26 October 2021, 8:32 am

Week 2021-10-18
21 October 2021, 10:03 am

Week 2021-10-11
15 October 2021, 6:34 am

Talks - abstracts

Workshop:

- Building applications quickly (Spec [GTK](#))
A showcase on how to build [gtk](#) applications "the [pharo](#) way", using the live coding characteristics of [Pharo](#).
- How to persist data with [Pharo](#)? [Mongo/Voyage](#), [Postgres](#), [ODBC](#)
A quick tour about persistence alternatives for [Pharo](#).

Pdays

- [Pheps](#)
[PhEP](#) stands for "[Pharo](#) Enhancement Proposal", and they are intended to handle what will be part of [Pharo](#) in the future, giving the community a better approach to participate to the making of [Pharo](#).
- Hands-on: How to build an image without [morphic](#), nor [dev](#) tools but with [spec 2](#) / [Gtk](#) ?
Deliver applications made in [Pharo](#) does not needs to ship all the development environment with it. We will present our advancements in [Pharo modularisation](#) that allows the packaging of *minimal* deliverable artifacts.
- [Spec2](#) / [Newtools](#)
[Spec2](#) has already a path behind it, but is just with [Pharo](#) 10 that its use has been pervasive to the environment, replacing almost all tools of the IDE. What's new, what's the same, what changes? We will make a quick tour about the framework and its usages.



Nevermind Tasks

File Window

✓ + 📄 🗨

🔍

Lists Ctrl+1

- Inbox
- Focus** 6
- Unsorted
- Life 3
- PharoDays 2022
- Pharo Debugger
- Difusion 2022
- Nextcloud
- Installer
- SmallTODO live tutorial
- PhEP proposal
- Signatures 2022
- Pharo 10
- PharoLauncher Gtk
- Notes 1.0
- Setup OBS
- NewTools-SystemBrowser
- NewTools-Spotter
- NewTools-Inspector
- NewTools-Playground
- Linden 1.0

★ Focus Ctrl+2

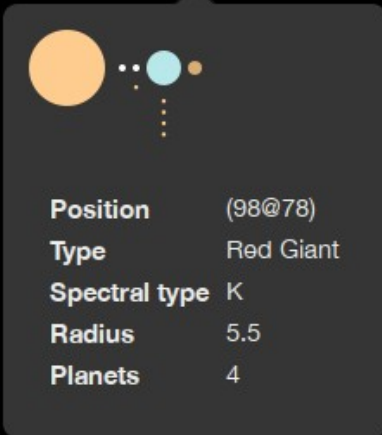
- Difusion 2022
- is there a way in SpTextPresenter to use ctrl-S to save text entry
- PharoDays 2022
- presentation dbs
- newtools (moldable)
- presentation spec2
- hands on spec2
- Spec2
- verify open modally for progress bars

+ 🔍 6 pending tasks. 🔍 ⓘ



Time: 0:00:00:00.043

(96@128) corner: (896@728)



The tooltip box contains a small diagram of a star system with three stars of different sizes and colors (orange, cyan, and brown) connected by dotted lines. Below the diagram is a list of properties for the selected star:

Position	(98@78)
Type	Red Giant
Spectral type	K
Radius	5.5
Planets	4





Speed: 75 Fuel Level: 53% Coords: 4262 23475 3236

Speed: 75 Fuel Level: 53% Coords: 4286 23583 3337

Speed: 75 Fuel Level: 53% Coords: 4310 23691 3439

Speed: 75 Fuel Level: 53% Coords: 4334 23799 3540

Speed: 75 Fuel Level: 53% Coords: 4358 23906 3642

Speed: 75 Fuel Level: 53% Coords: 4383 24014 3743

Uncharted space

Disabled StarSpeeder 500 'Star Messenger' 3238 18902 -1064

Your Coordinates: 4387 24036 3763

OOC [|||||] < >

Health 3682/3682 Move 4240/4240

Tone [none] Time [day] Ambience [quiet] Comlink [-:-]

<

Using your skill with navigation you reroute energy to the hyperdrives.

Hyperspace course locked. Running final jump checks...

Jump requires 5 units of fuel. It will consume 0% of the remaining fuel.

Checking hyperspace course integrity. Please wait.

OOC [|||||] < >

Health 3682/3682 Move 4240/4240

Tone [none] Time [day] Ambience [quiet] Comlink [-:-]

<

[Status]: Hyperspace calculations have been completed.

Speed: 75 Fuel Level: 53% Coords: 4407 24122 3844

Speed: 75 Fuel Level: 53% Coords: 4431 24230 3946

System -19, -17: Uncharted space

Coords 4450, 24316, 4026

Speed

 75/75 (100%)

Energy

 53%

Shields

 140/140 (100%)

Hull

 115/115 (100%)

hide sneak fortify clearstack show... ai flee hitall appro none

recharge #kdragon .first 30 drop... 20 aim none ammo

Map Galaxy



Crimson Dawn

08:54 :|Crimson Dawn|:|R&D|<Mastermind>[Caemdor]: Hello Deeg.
 08:54 :|Crimson Dawn|:|Admin|<Advisor>[Deeg]: Hey. How things? Any news?
 08:55 :|Crimson Dawn|:|R&D|<Mastermind>[Caemdor]: Nothing new as far as I k
 now.
 08:55 :|Crimson Dawn|:|Admin|<Advisor>[Deeg]: Boss been around?
 08:55 :|Crimson Dawn|:|R&D|<Mastermind>[Caemdor]: No.
 08:56 :|Crimson Dawn|:|Admin|<Advisor>[Deeg]: That development we had in mi
 nd before I took my holidays... was done?
 08:56 :|Crimson Dawn|:|R&D|<Mastermind>[Caemdor]: Not sure.
 08:57 :|Crimson Dawn|:|Admin|<Advisor>[Deeg]: Hmmm. Okay! Let's hope he sho
 ws up next days so we can stablish goals for when he is busy.

CommNet

09:38 CommNet 615 [An Ithorian male]<An unfamiliar dialect>: Cbm A wdbjnzfl
 h Kjgxj QC-3810? wc jdnhk atamwkeq llt.
 09:40 CommNet 615 [Oyuna](warmly): Sorry, could you repeat that?
 09:41 CommNet 615 [An Ithorian male]<An unfamiliar dialect>: Apiix P jvjfjz
 jj d LZ-5747? Snekp rpqfevj, wo lqotakhlpv vtcbrtbb gkuttddyc.
 09:42 CommNet 615 [Oyuna](warmly): Certainly. Make your way to Bespin and
 one will be brought out for you.
 09:44 CommNet 615 [An Ithorian male]<An unfamiliar dialect>: Dtpvt Coagbb n
 zkr oelioieigdxdy wowxhe, Yy biad udadlatc?
 09:44 CommNet 615 [Oyuna](warmly): Yes. Make your way to Bespin and one w
 ill be brought out for you.

OOC

per-documaps - Ingenieurbüro für Bauwesen Schmidt GmbH

Übersicht 2019-132 x 2019-130 x Suchen Schnelle Suche ...

Projekt
Projekt-ID

Neu erstellen Bearbeiten Kopieren Löschen Eigenschaften Einstellungen

2019-132 Architekt Beckmann St. Barbara-Hospital Gladbeck...

LP1_Grundlagen

Bezeichnung	Zuletzt bea...	Datum	Status
Sicheres Krankenhaus _ Notfa...SBäcker			Freigegeb...
Sicheres Krankenhaus _ Notfa...SBäcker			Freigegeb...
Sicheres Krankenhaus _ Notfa...SBäcker			Freigegeb...

Pläne Dritter

Vermessung Büro Claaßen 14.05.2019

Bezeichnung	Zuletzt bea...	Datum	Status
LP_170515_3D	TLuke		Freigegeb...

LP2_Vorentwurfsheft

Bezeichnung	Zuletzt bea...	Datum	Status
Darstellung Höhengsituation	SBäcker		Freigegeb...

Honorar

- Verkehrsanlagen (2013):: St. Barbara Hospital Gladbeck - Parkplatz (A
- Verkehrsanlagen (2013): Nachtrag Nr. 1 Flächenvergrößerung (Honor
- Verkehrsanlagen (2013)- St. Barbara Hospital Gladbeck - Parkplatz (1.
- Projektbuchhaltung2020_01

Papierkorb

- 2019-04-30-Anfrage Bür
- 2019-05-01-Auftrag von
- 2019-05-03-Vermesserp
- 2019-05-13-Vermessung
- 2019-05-14-Vermessung

Kalender Adressen Suchen



Status in a nutshell

- Reaching v1.0
 - Not yet there, but API is stable and will not change.
- Widgets and layouts enough to allow a “standard” application to work both in Morphic and GTK back-ends.
 - Bloc ongoing, but this is early steps yet



Use case : Analyze some data

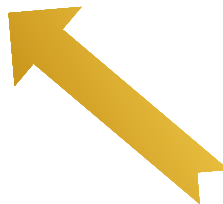
- Typical scenario while doing science
- The kind of program you want to produce results but do not want to spend much time on it.



Showcase: Managing Stef books




```
(collection : SF
  (author : Adam, Douglas
    (serie : books
      (title : Le guide du voyageur inter-galactique (read : true) (style : comic english
humour) (summary : un gars est capture par un vaisseau spatial et il lui arrive plein d'histoire
aussi debiles les unes que les autres))
      (title : H2G2 2 (price : 2) (read : false) (style : comic english humour))
      (title : H2G2 3 (price : 2) (read : false) (style : comic english humour))
      (title : H2G2 4 (price : 2) (read : false) (style : comic english humour)))
    )
  (author : Benassaya, Romain
    (serie : books
      (title : Arca (read : false)))
    )
  (author : Cazeault, Patrice
    (serie : Averia
      (title : Laika Kodos (number : 3) (read : false))
      (title : Myr Chernova (number : 2) (read : false))
      (title : Seki Annika (number : 3) (read : false))
    )
  )
  ...
)
```



Data = D-Lists



```
Playground
Do it Publish Bindings Versions Pages
1 dlist := DLittleLParser parse: ( './books.dl' asFileReference contents ).
2
3 presenter := SpPresenter new.
4 presenter application: ( SpApplication new useBackend: #Gtk ).
5 presenter layout: SpBoxLayout newTopToBottom.
6 presenter open.
7 presenter window title: 'Books'.
8
9 presenter layout add: ((tree := presenter newTree)
10   roots: { dlist };
11   children: [ :aList | aList rest ];
12   yourself).|
Line: 1:1 +L
```

Books

- ▼ (collection : SF (author : Adam, Douglas (serie : books (title : Le guide du voyageur inter-gala
- ▼ (author : Adam, Douglas (serie : books (title : Le guide du voyageur inter-galactique (read
- ▼ (serie : books (title : Le guide du voyageur inter-galactique (read : true) (style : comic er
- ▶ (title : Le guide du voyageur inter-galactique (read : true) (style : comic english humo
- ▼ (title : H2G2 2 (price : 2) (read : false) (style : comic english humour))
- (price : 2)
- (read : false)
- (style : comic english humour)
- ▶ (title : H2G2 3 (price : 2) (read : false) (style : comic english humour))
- ▶ (title : H2G2 4 (price : 2) (read : false) (style : comic english humour))
- ▶ (author : Pinto, Rafael (serie : books (title : Plop (read : false))))
- ▶ (author : Benassaya, Romain (serie : books (title : Arca (read : false))))
- ▶ (author : Cazeault, Patrice (serie : Averia (title : Laika Kodos (number : 3) (read : false)) (tit
- ▶ (author : Naam, ramez (serie : books (title : Apex (read : false))))
- ▶ (author : Di Filippo, Paul (serie : books (title : La trilogie steam punk (read : false))))
- ▶ (author : Gudule (serie : books (title : Le club des petites filles mortes (read : false))))
- ▶ (author : Duncan, Hal (serie : le livre de toutes les heures (title : Velum - le livre de toutes l
- ▶ (author : Povel, Pierre (serie : books (title : La trilogie de wielstadt (read : false))))
- ▶ (author : Dickinson, Charles (serie : books (title : Quize minutes (price : 1.0) (read : false))



```
Playground
Do it Publish Bindings Versions Pages
1 dlist := DLittleLParser parse: ('./books.dl' asFileReference contents).
2
3 presenter := SpPresenter new.
4 presenter application: (SpApplication new useBackend: #Gtk).
5
6 presenter layout: SpBoxLayout newLeftToRight.
7
8 presenter open.
9
10 presenter window title: 'Books'.
11
12 presenter layout add: ((tree := presenter newTree)
13   children: [ :anElement | anElement children ];
14   display: [ :anElement | anElement asString ];
15   yourself).
16
17 tree roots: { BkCollection fromDList: dlist }.
18
19 presenter layout add: (detail := presenter newPresenter
20   layout: SpBoxLayout newTopToBottom;
21   yourself).
22
23 tree transmitDo: [ :anItem |
24   | newPresenter |
25   newPresenter := anItem asMagritteSpecPresenter.
26   presenter layout
27     replace: detail
28     with: newPresenter.
29   detail := newPresenter ]
```

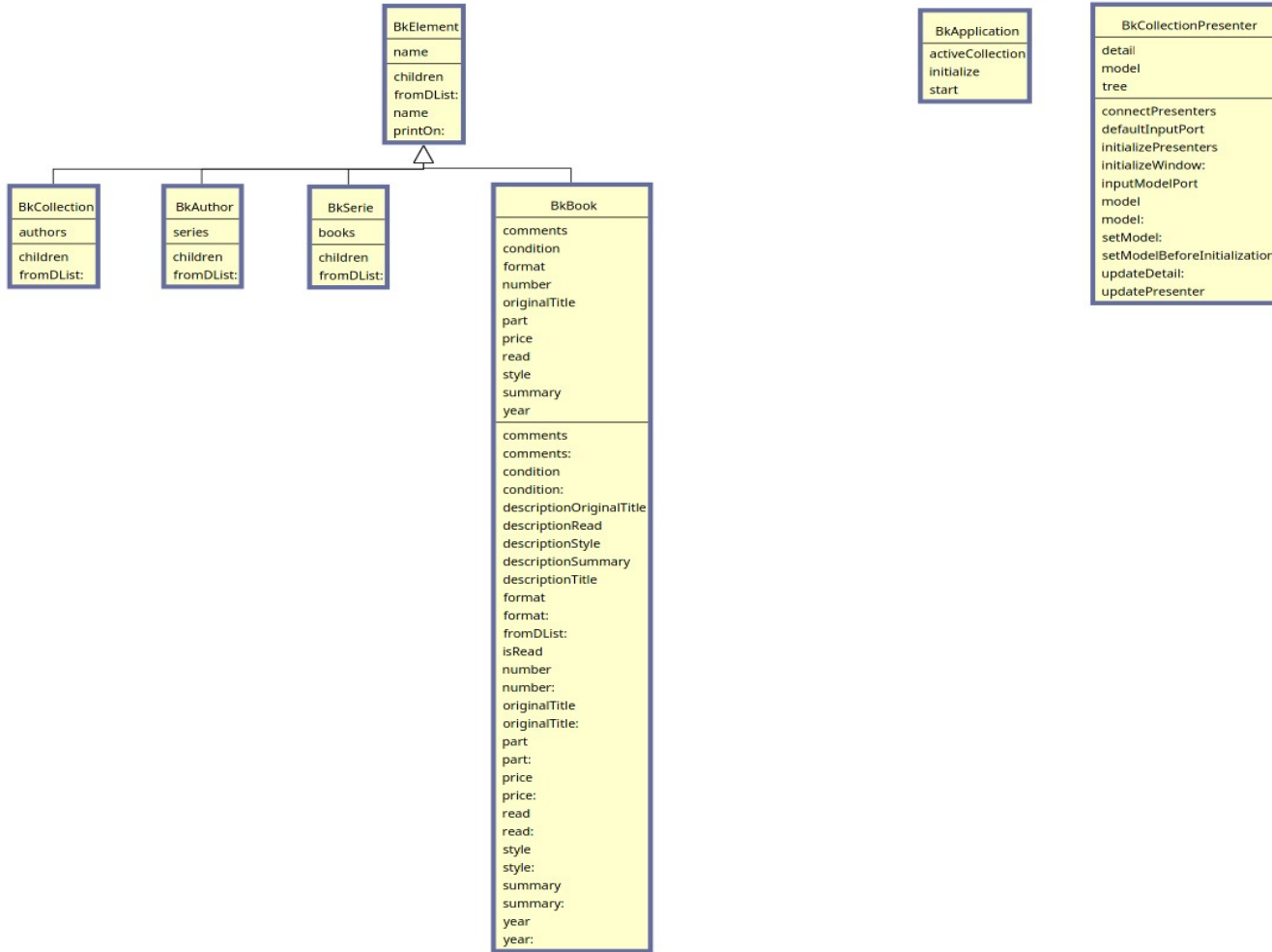
Line: 14:36 +L

Books

- ▼ SF
 - ▼ Adam, Douglas
 - ▼ books
 - Le guide du voyageur inter-
 - H2G2 2
 - H2G2 3
 - H2G2 4
 - ▶ Pinedo, Rafael
 - ▶ Benassaya, Romain
 - ▶ Cazeault, Patrice
 - ▶ Naam, ramez
 - ▶ Di Filippo, Paul
 - ▶ Gudule
 - ▶ Duncan, Hal
 - ▶ Pevel, Pierre
 - ▶ Dickinson, Charles
 - ▶ Damasio, Alain
 - ▶ Aldiss, Brian
 - ▶ Anderson, Poul
 - ▶ Ange,
 - ▶ Asimov, Isaac
 - ▶ Derleth, August
 - ▶ Ayerdhal,
 - ▶ Abercrombie, Joe
 - ▶ Bacigalupi, Paolo
 - ▶ Baker, Scott
 - ▶ Baker, Kage
 - ▶ Ballard, J.G.
 - ▶ Banks, Iain

Title	Le guide du voyageur inter-galactique
Original Title	
Style	comic english humour
Summary	un gars est capture par un vaisseau spatial et il lui arrive plein d'histoire aussi debiles les unes que les autres
Read	<input checked="" type="checkbox"/>





BkApplication>>start

BaselineOfSpec2

Books

- Model
- View
- Commander-Spec2-Compatibi
- Spec2-Adapters-Morphic
- Spec2-Adapters-Morphic-Test
- Spec2-Adapters-Stub
- Spec2-Backend-Tests
- Spec2-Code

Books|Spec2

Filter...

BkApplication

- BkCollectionPresenter
- BkElement
 - BkAuthor
 - BkBook
 - BkCollection
 - BkSerie

instance side

- accessing
- initialization
- running
- overrides

activeCollection

- initialize
- start

All Packages | Scoped View | Flat | Hier. | Inst. side | Class side | Methods | Vars | Class refs. | Implementors | Senders

Comment | BkApplication | start | Inst. side metl

```
start

(BkCollectionPresenter
 newApplication: self
 model: self activeCollection)
open
```

6/6 [7] running extension F +L W

