

<http://lib.ugent.be/m>

Patrick.Hochstenbach@UGent.be

Paul.Bastijns@UGent.be

Ghent University Library

Autumn School m-library & e-books – Oct 25 2010

# Ghent University

- °1817
- + 30.000 students

# University Libraries Ghent

- University library (booktower )
- 9 faculty libraries
- + 200 department libraries



2 system librarians / E-resources manager

- ILS: Aleph
- Link resolver: SFX
- ERM: Verde

3 system administrators / Developers

- Content management
- Institutional Repository
- Front End Discovery engine
- Digital Preservation

# Part I - The Numbers

*“Mobile phones will overtake PCs as the most common Web access devices worldwide by 2013 ... the combined installed base of smartphones and browser-equipped enhanced phones will surpass 1.82 billion units by 2013, eclipsing the total of 1.78 billion PCs by then.”*

**(Gartner, 2010)**

# Mother of All Markets

The New York Times

## The Executive Computer; 'Mother of All Markets' or a 'Pipe Dream Driven by Greed'?

By Peter H. Lewis  
Published: July 19, 1992

1992

**BURLINGAME, Calif.**— Sometime around the middle of this decade no one is sure exactly when -- executives on the go will begin carrying pocket-sized digital communicating devices. And although nobody is exactly sure what features these personal information gizmos will have, what they will cost, what they will look like or what they will be called, hundreds of computer industry officials and investors at the Mobile '92 conference here last week agreed that the devices could become the foundation of the next great fortunes to be made in the personal computer business.

"We are writing Chapter 2 of the history of personal computers," said Nobuo Mii, vice president and general manager of the International Business Machines Corporation's entry systems division.

How rich is this lode? At one end of the spectrum is John Sculley, the chief executive of Apple Computer Inc., who says these personal communicators could be "the mother of all markets."

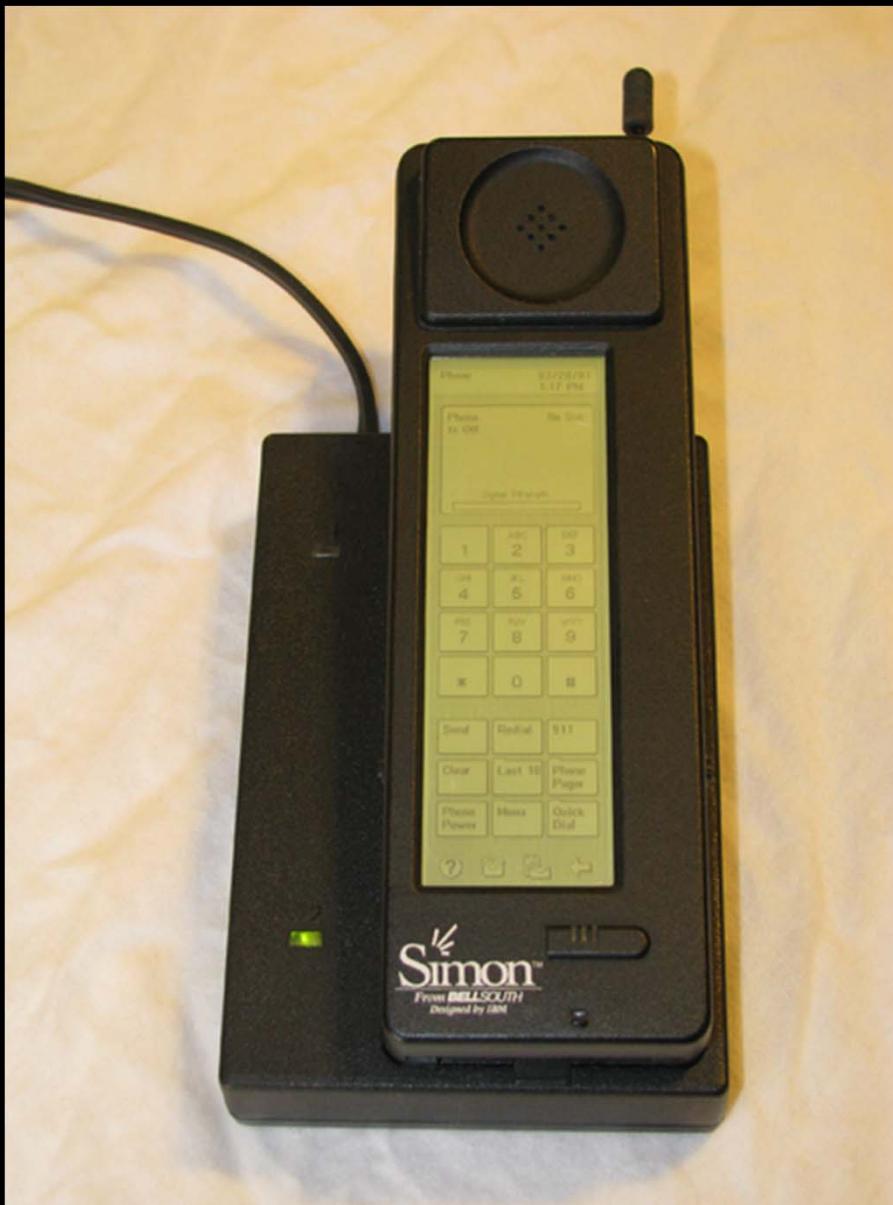
SIGN IN TO E-MAIL

PRINT

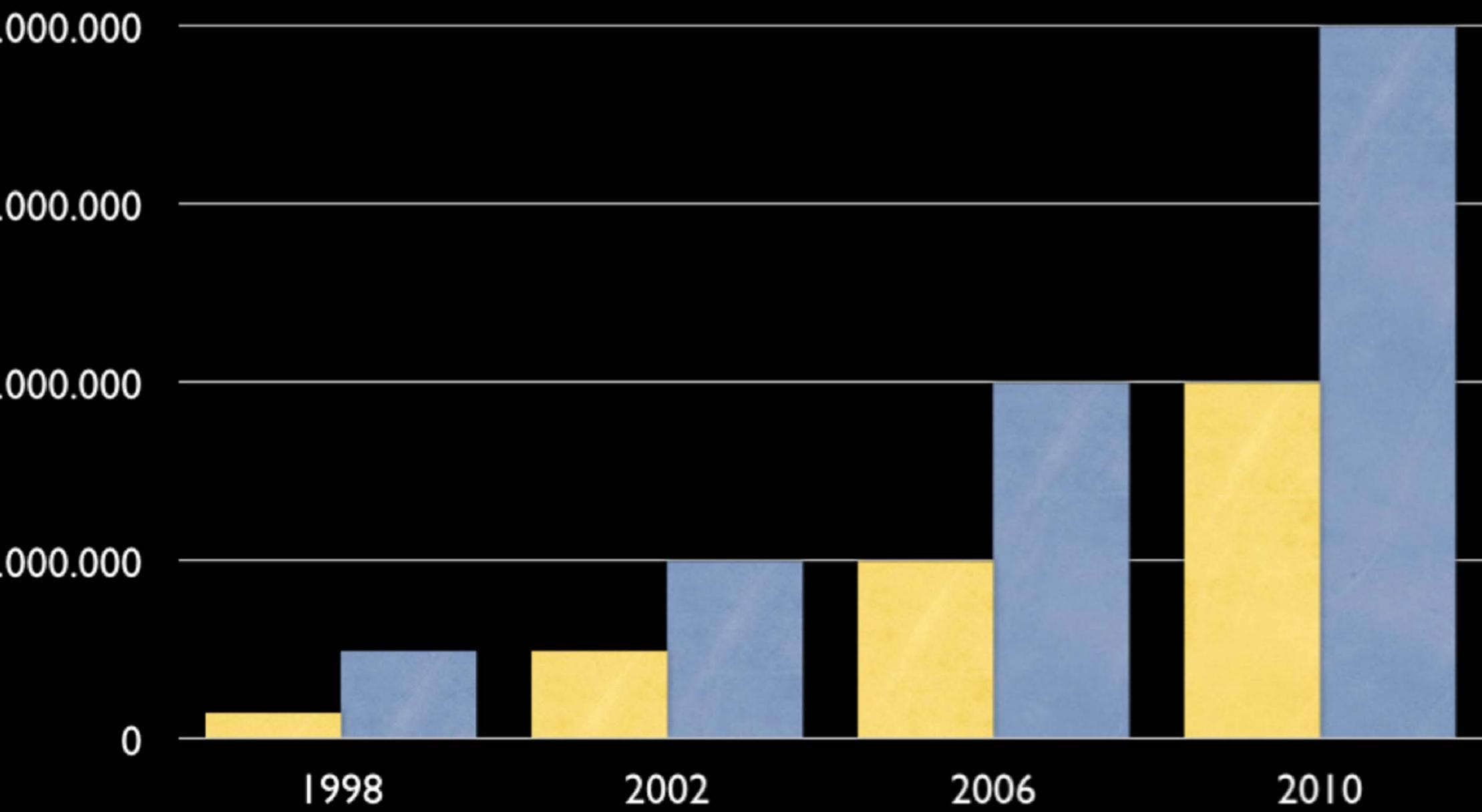
SINGLE-PAGE



# Simon (1992)



# Exponential Growth



# Huge Market

- Mobiles > Cars + PC's + TV's combined
- Revenue SMS > Hollywood
  - Box Office + DVD Sales + Music Industry + Video Games
- Smart Phones, Kindle, Tablet, MP3, Car Electronics, Mobile Video, Wireless Home Appliances, Smart Fabrics

# Increasing Capabilities



1998  
PDA

2002  
Camera  
Games

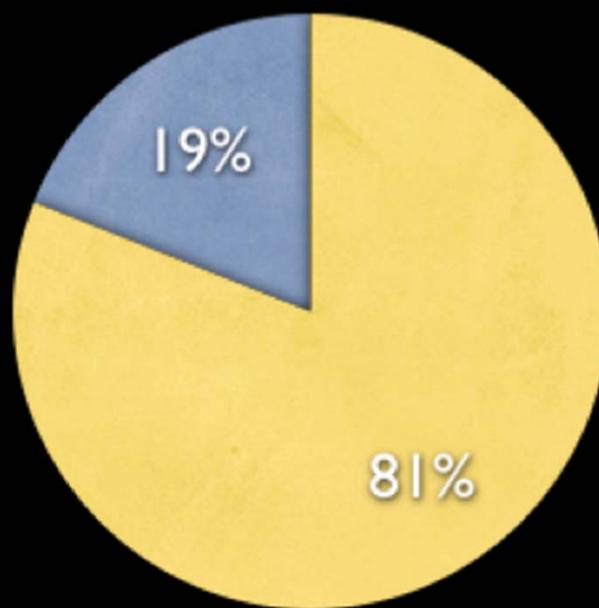
2006  
Email  
Music

2007  
Video  
Web  
GPS

2010+?  
Tablet  
Television  
3D Touch

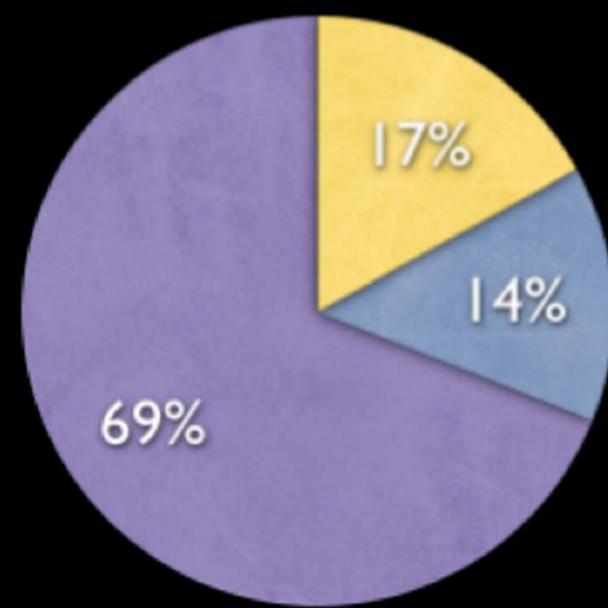
# 2010 worldwide statistics

Cell Phones  
Smart Phones



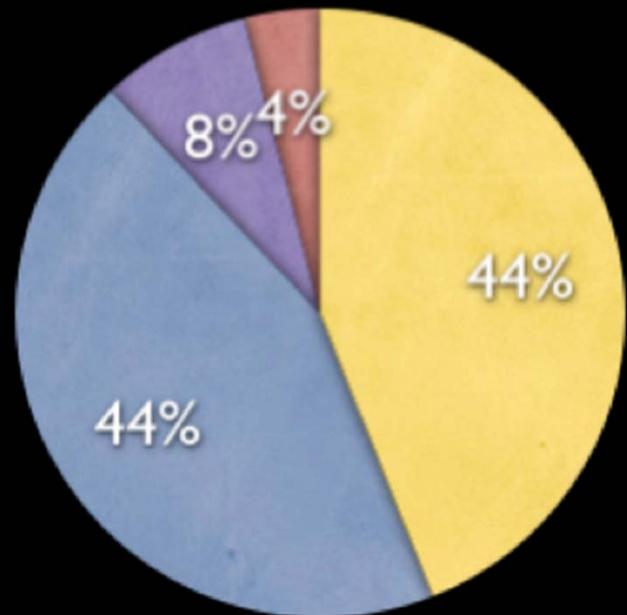
2010 Q2 worldwide mobile sales  
19% of mobile market = smart phones

Android  
iPhone  
Rest



2010 Q2 smart phone market  
31% of smart phones =  
Android or iPhone

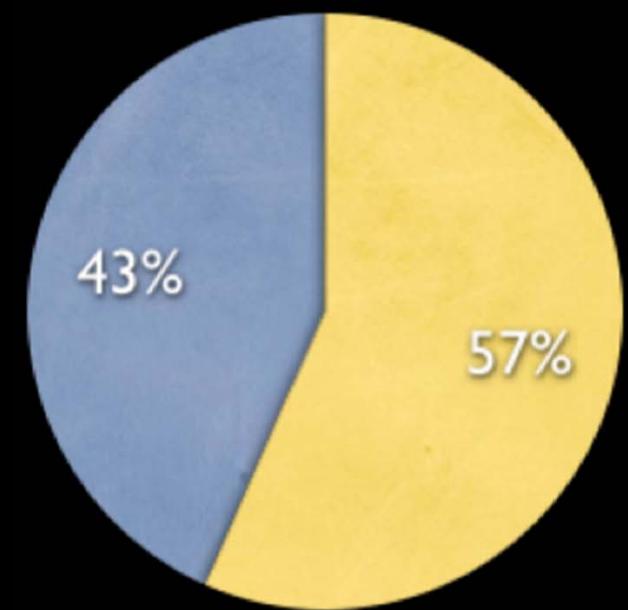
Android  
BlackBerry  
iPhone  
Rest



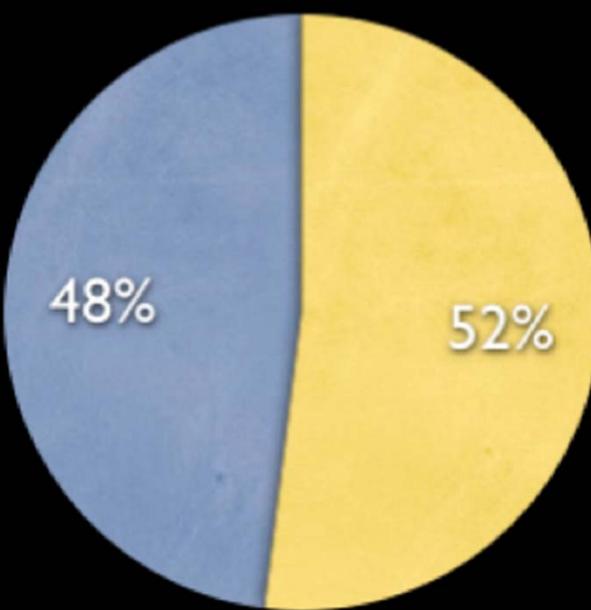
2010 web statistics  
88% Android or iPhone

# University Statistics

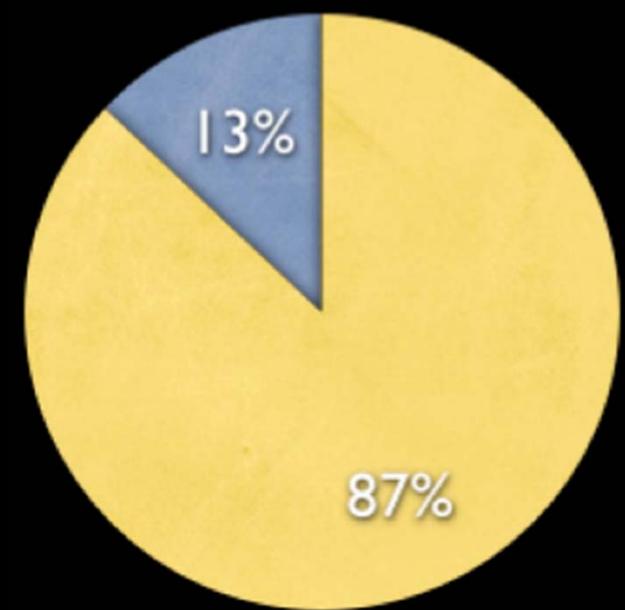
JC Davis 2009 TU Delft 2010 UGent 2010



43% surf the web  
- 88% read email  
- 90% websites  
- 72% read books/articles

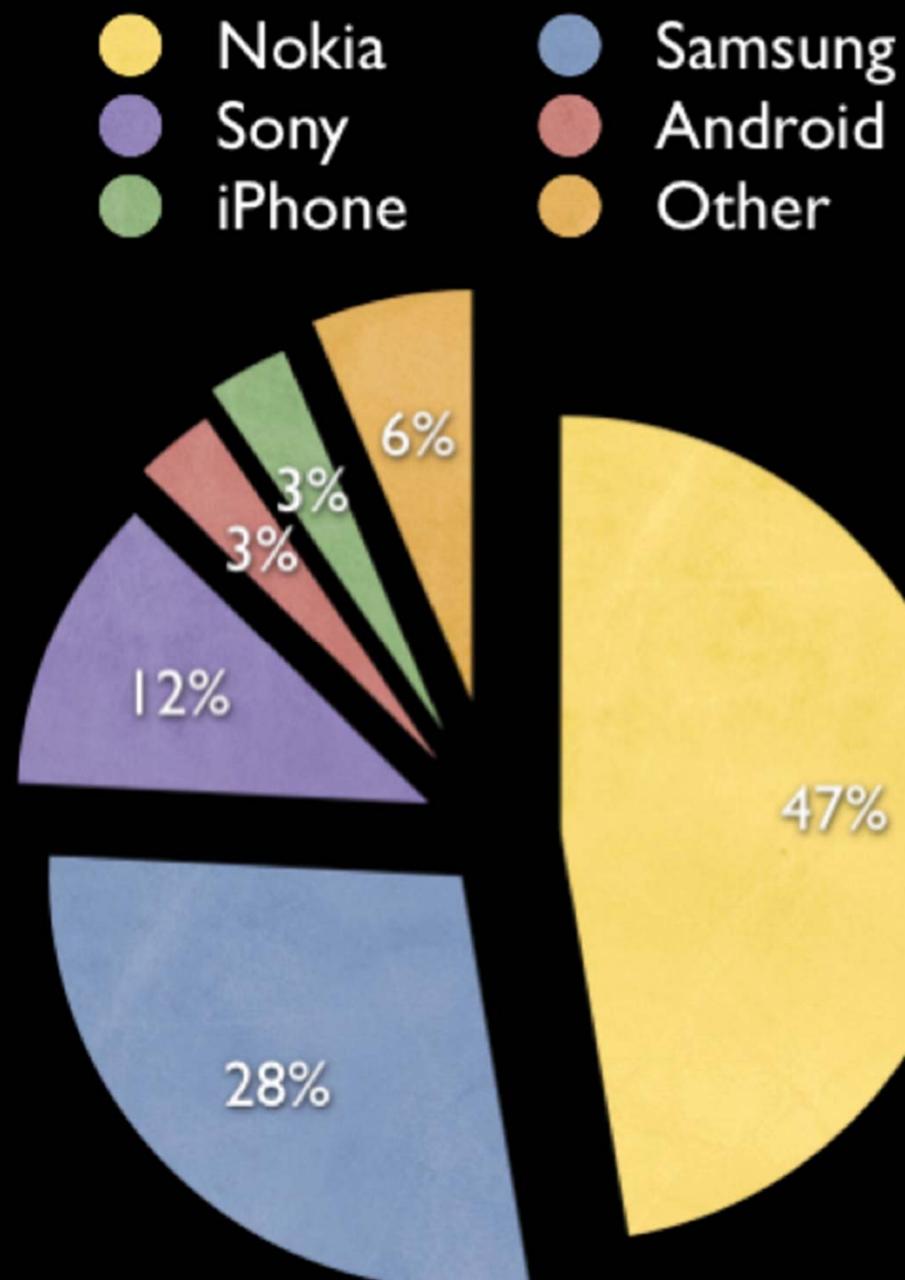


● Mobile Voice  
● Mobile Data

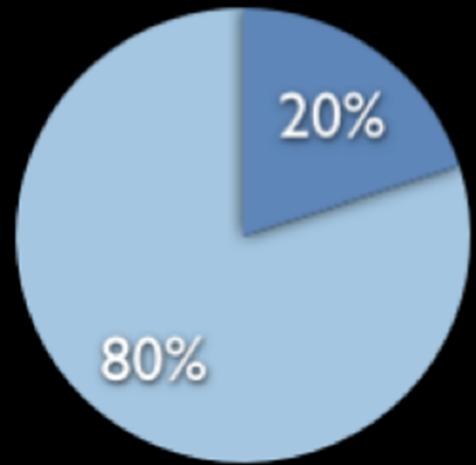


13% surf the web  
- 55% read email  
- 65% websites  
- 35% read books/articles

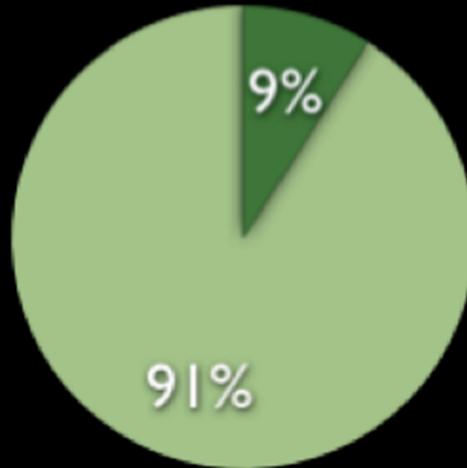
# Smartphone Platforms



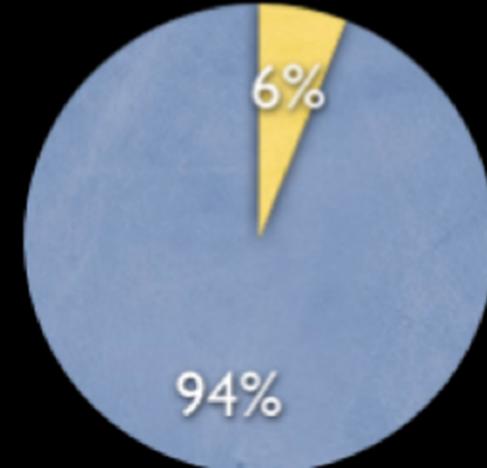
# Internet Stats



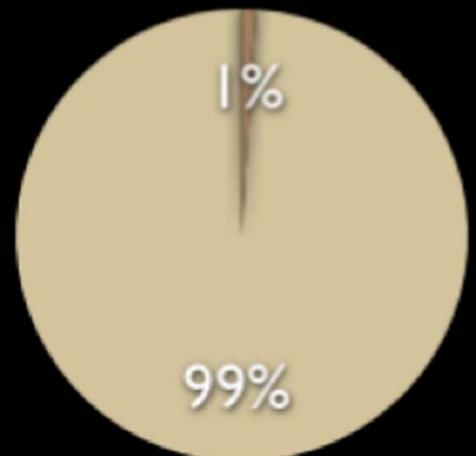
Facebook



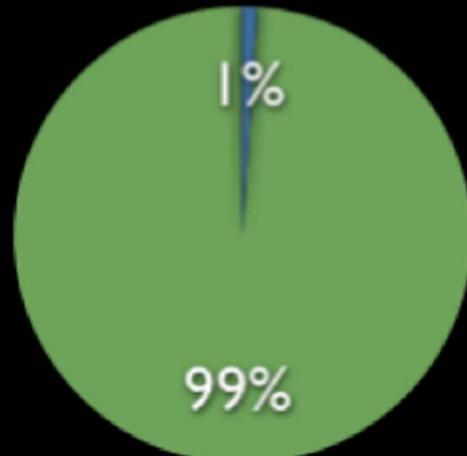
Google



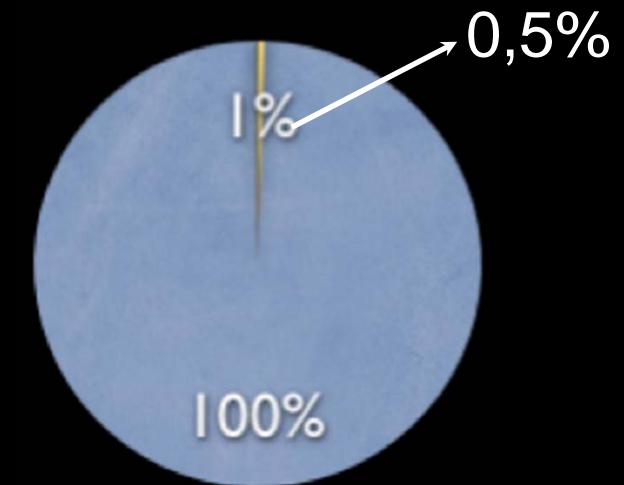
Twitter



WorldCat



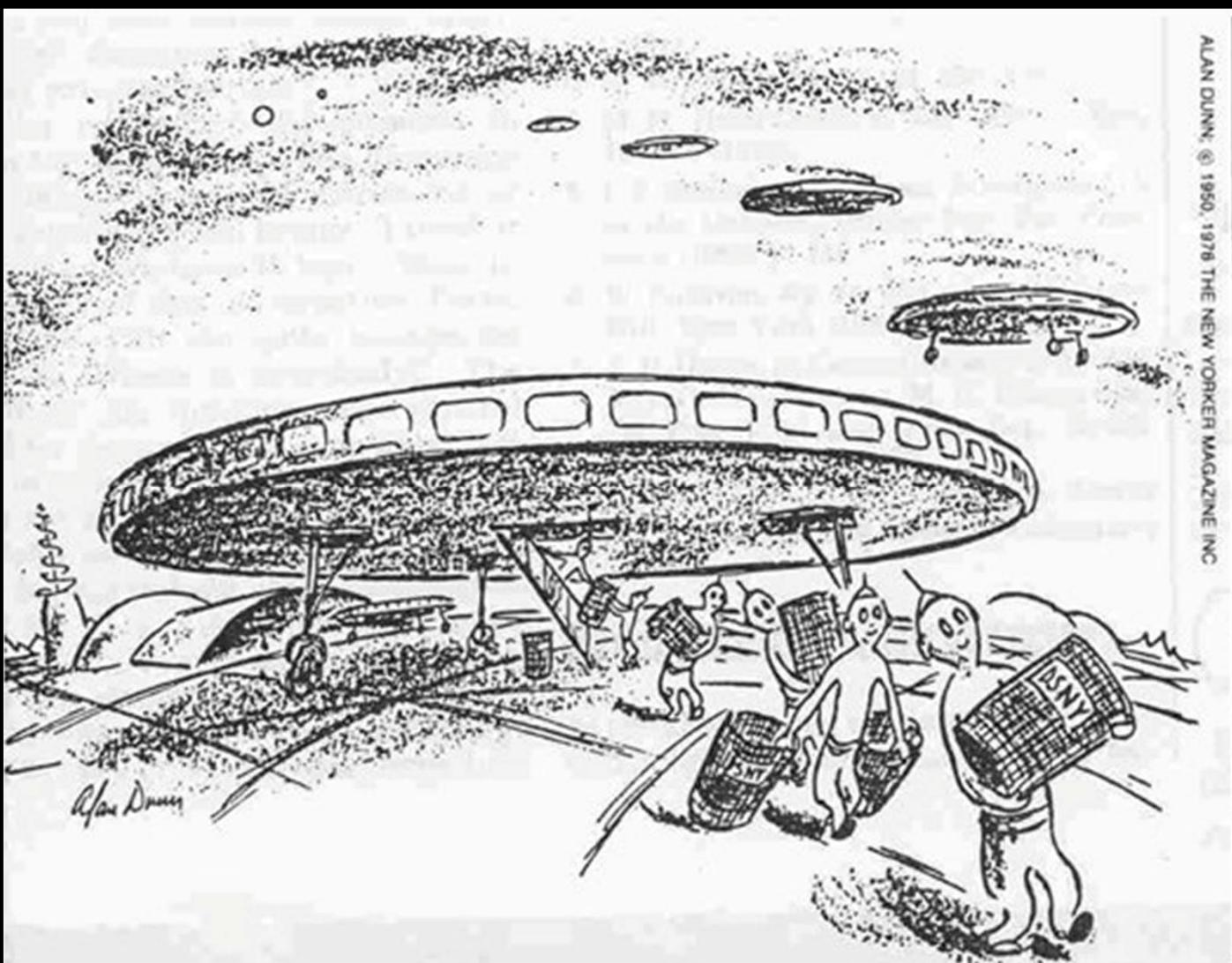
EBSCO



UGent

Where are they?

*Enrico Fermi - 1950*



# Part II – Implementation

*The Web Is Dead. Long Live the Internet.*

(Chris Anderson and Michael Wolff, 2010)

# Mobile options

'dumbed down' version of website  
HTML5/CSS3 website  
native app

# 2009 Prototype 1

- WebApp
- No JavaScript
- Simplified CSS
- 480 x 320
- Fast & Easy prototyping (2 days to set it up)

# 2009 Prototype 1

■■■■■ BASE E 11:47 91 %

Schopenhauer Zoek

Alles  Tijdschriften  Datab...

**Meercat - Mobile**



Ontdek de boeken, tijdschriften, beelden, databanken en dissertaties van de Universiteitsbibliotheek via **MeerCat**, de overkoepelende bibliotheekcatalogus.

Vind hier referenties naar meer dan 4.000.000 boeken, e-boeken, tijdschriften, e-tijdschriften, gescande afbeeldingen, thesissen, databanken en websites, etc. beschreven in de Aleph catalogus en CatFich, de gedigitaliseerde steekkaartencatalogus.

**Het Netwerk**

Bibliotheekadressen en openingsuren:

- Boekentoren
- FB Letteren

◀ ▶ + ⌂ 3

■■■■■ BASE E 11:47 91 %

Schopenhauer Zoek

Alles  Tijdschriften  Databanken

Resultaten **1 - 10** van **509** voor **Schopenhauer**

1 2 3 4 5 6 7 8 9 10 Volgende Laatste

**De vrijheid van de wil. Over Schopenhauer / vert. en van verklarende noten voorzien door Hans Driessens.**

Schopenhauer, Arthur, 1788-1860  
1999.

**Philosophie der Mode (1905) ; : Die Religion (1906/1912) ; Kant und Goethe (1906/1916) ; Schopenhauer und Nietzsche (1907) / Georg Simmel; herausgegeben von Michael Behr, Volkhard ...**

Simmel, Georg, 1858-1918.  
c1995.

**Schopenhauer : proef van een psychoanalyse van de filosoof / Hirschmann Eduard; vert. Elly Schippers**

◀ ▶ + ⌂ 3

# 2009 Prototype 1

BASE E 11:48 91%

**Schopenhauer : proeve van een psychoanalyse van de filosoof / Hitschmann, Eduard; vert. Elly Schippers.**

<<Terug naar resultaten  
<Vorige Volgende>

**Orig. Title:** Schopenhauer: Versuch einer Psychoanalyse des Philosophen;  
**Other Title:** Schopenhauer: ein Versuch einer Psychoanalyse des Philosophen;  
**ISBN:** 9060098706;  
**Author:** **Hitschmann, Eduard** ;  
**Author:** **Schippers, Elly**  
  
**Publisher:** Meppel : P. 1989.;  
**Description:** 112 p.  
**Series:** Psychoanalyse cahiers ;  
**Location:** Request B.B.N.052376 ;  
**Location:** Request PPW.15D.0046 ;

---

(c) 2009 University Library Gent

BASE E 11:54 90%

search.ugent.be:8000/... Google

**Request item from library**

**Name:**  
Patrick Hochstenbach

**E-mail or GSM number:**  
1234567890

**UGent ID:**  
12132543764

**Choose one action:**  
 I want to borrow this work (if possible)  
 I want to read this work in the library

**Choose a library or item:**  
**BIB.N.052376**

(c) 2010 Universiteitsbibliotheek Gent,

# 2009 Results

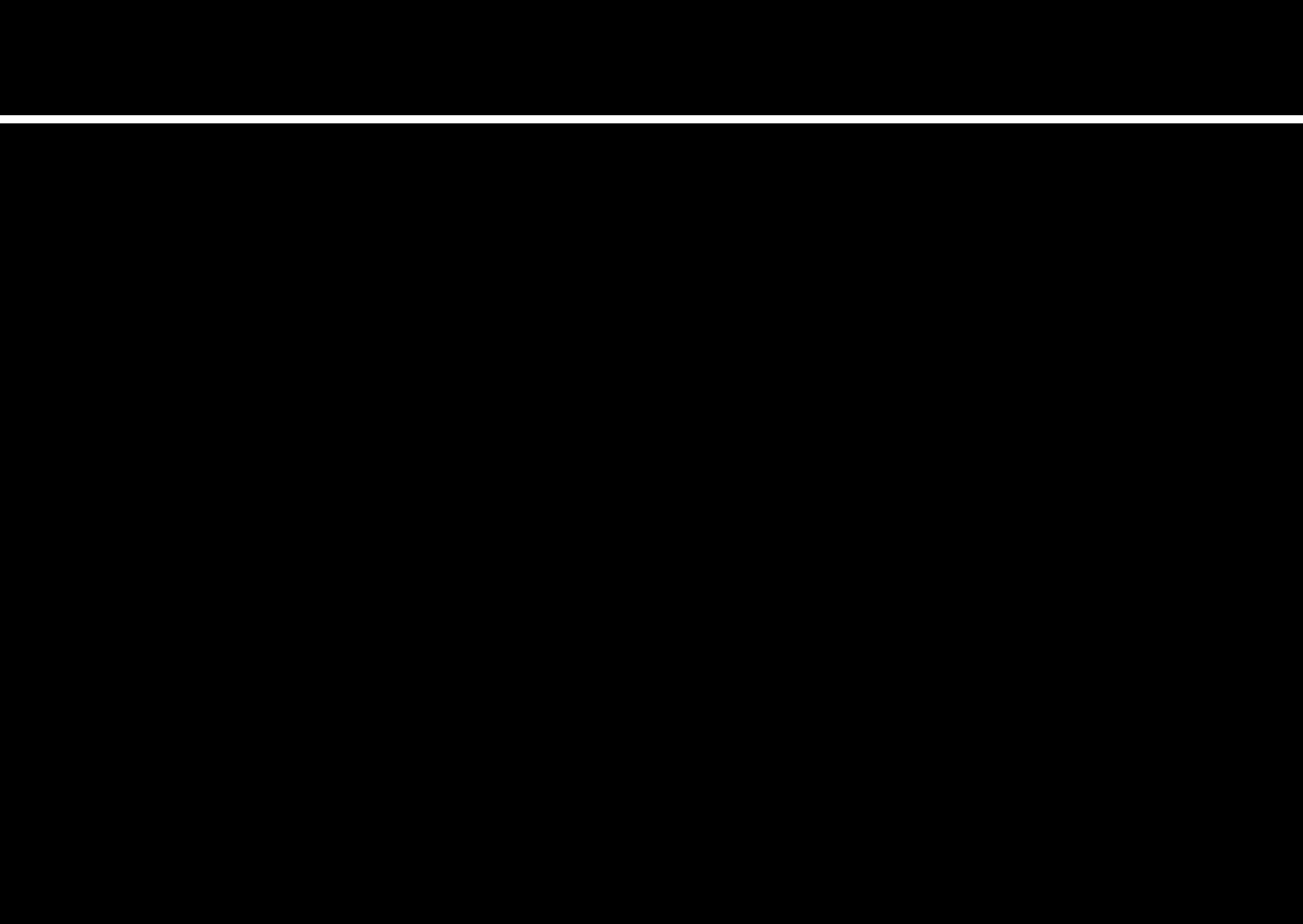
- Mobile web = absolute developer fun!
- Issues in 2009:
  - Mobile Web != Desktop Web (maybe this will change?)
  - Still a bit Wild West: new practices, quirks and workarounds
  - Touchscreen input sometimes difficult
  - What about: GPS, telephone, tilt/touch sensors & other device features? Will HTML5 keep up with hardware development?

# Mobile features

Access everywhere / anytime  
Location awareness  
Context awareness

# 2010 Prototype 2

- <http://www.boopsie.com>
- Hybrid Application: Native + HTML code
- iPhone, Android, BlackBerry, WinMobile, ...
- MARC Dumps/Z39.50
- Aleph 500 integration
- Word/Excel to define menu's



# viaan menu...



BASE E 10:49 68 %

Back UGent Libraries

UNIVERSITEITS BIBLIOTHEEK GENT

- Library Network  
find a library near you >
- My Account >
- Search the Catalog >
- Infodesk Live Chat >
- Library News >
- UGent Tweets >
- Mobile Databases >

# GPS-powered search...

..ll BASE E 10:49 68 %

Back **UGent Libraries** 

 **UGent Libraries**

-  **Library Network**  
find a library near you >
-  **My Account** >
-  **Search the Catalog** >
-  **Infodesk Live Chat** >
-  **Library News** >
-  **UGent Tweets** >
-  **Mobile Databases** >

..ll BASE E 10:50 68 %

Back **find UGent Libraries** 

 **UGent Libraries**  
**Library Locator**

-  **(0.3 km) Biochemie**  
A. baertsoenkaai 3  
Gent, 9000 >
-  **(0.3 km) Gerechtelijke geneeskunde**  
J. kluyskensstraat 29  
Gent, 9000 >
-  **(0.4 km) Histologie**  
Louis pasteurlaan 2  
Gent, 9000 >
-  **(0.4 km) Aquatische ecologie**  
Jozef Plateaustraat 22 (gelijkvloers,  
lokaal b.o.30)  
Gent, 9000 >
-  **(0.4 km) Centrum voor  
milieusanering**  
Jozef Plateaustraat 22 (lok. B1.16,  
verdiep 2)  
Gent, 9000 >



# GPS-powered search...

.. BASE E 10:50 68 %

Locations Aquatische ecol... 

 UGent Libraries Library Locator

Aquatische ecologie

**Address (click for map)**  
Jozef Plateaustraat 22 (gelijkvloers, lokaal b.o.30)  
Gent, 9000 

**Phone (click to call)**  
09/264.37.65 

**Email (click to send)**  
A90@mail.lib.ugent.be 

**Hours**

Sun X

Mon 09.00-12.00  
14.00-16.30

Tue 09.00-12.00  
14.00-16.30

Wed 09.00-12.00  
14.00-16.30

Thu 09.00-12.00  
14.00-16.30

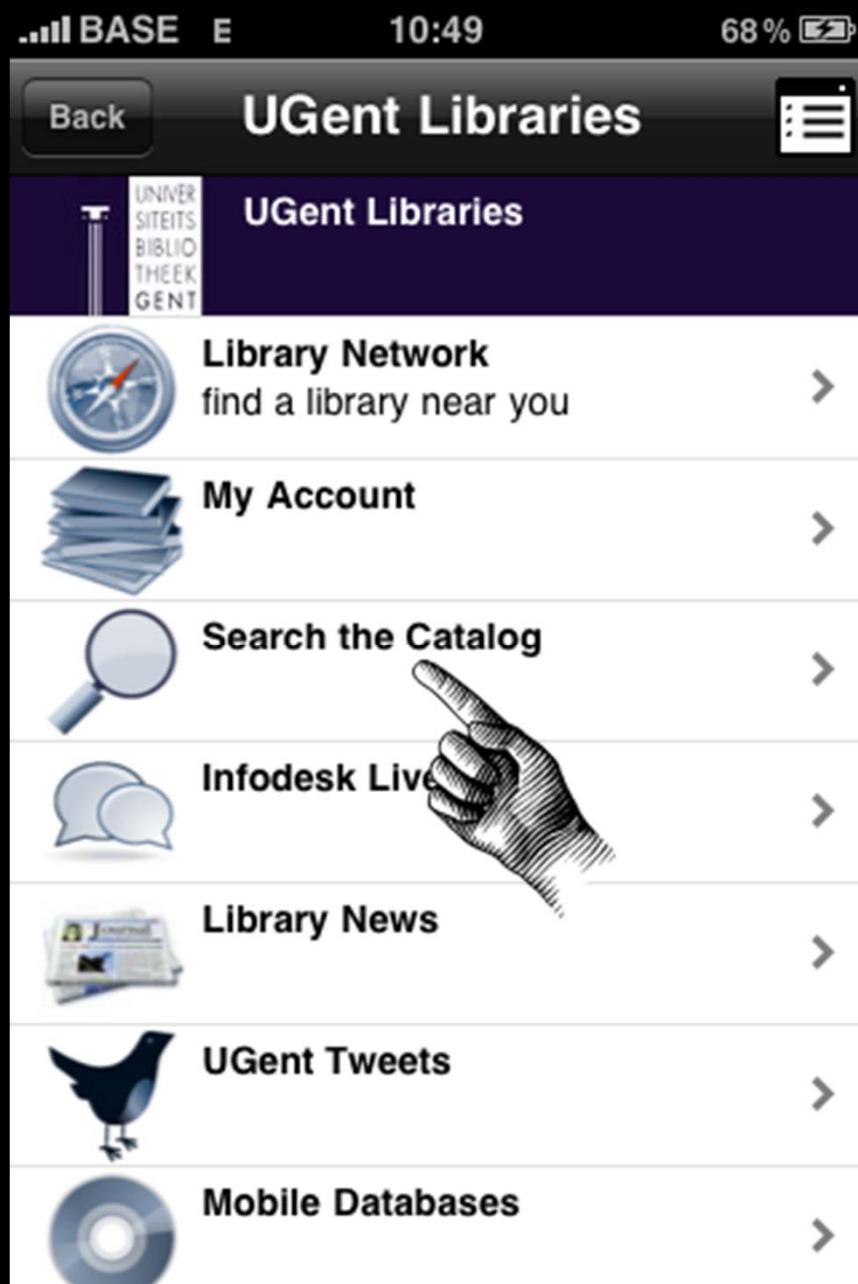




# Incremental search...

SMS like search, show results while you

type...



# short and long views...

.. BASE E 10:51 69 %

Back Bel verdr cl

UGent Libraries Catalog  
Ghent University

Het verdriet van België  
by \*Hugo Claus \*\*\*  
Amsterdam : Bezige Bij, 1995.

Het verdriet van België  
by \*Hugo Claus \*\*\*  
Amsterdam : Bezige Bij, 2004.

Het verdriet van België.  
by \*Hugo Claus \*\*\*  
Amsterdam : Bezige Bij, 1983.

Over Het verdriet van België  
by \*Cees Nooteboom; \*Hugo Claus \*\*  
Amsterdam : Atlas, 2004.

Claus' roman Het verdriet van België  
vanuit een receptie-historisch perspectief  
:  
by \*Tania Trogh; \*Yves T'Sjoen \*\*  
S.l. : s.n.

Claus' geheimschrift : een handleiding bij  
het lezen van Het verdriet van België.  
by \*Dina Weisgerber; \*Jean Weisgerber \*\*  
Brussel : VUB press, 1995.



.. BASE E 10:51 69 %

Holdings <type here>

Detail Record  
(Item 000529288)

Het verdriet van België / Hugo Claus.

author  
Claus, Hugo

Universiteitsbibliotheek - boekentoren  
BIB.N.027444

published  
Amsterdam : Bezige Bij, 1995.

description  
774 p.

Request Item  
(click for request form)



# hold request...

The screenshot shows a mobile application interface for requesting items from a library. At the top, there is a status bar with signal strength, battery level (69%), and time (10:52). Below the status bar is a navigation bar with a "Back" button and a menu icon. The main content area has a title "Request item from library". It includes fields for "Name" (Jan Jansen), "E-mail or GSM number" (0123456789), and "UGent ID" (1010101010101). A section titled "Choose one action:" contains two radio buttons: one selected for "I want to borrow this work (if possible)" and another for "I want to read this work in the library". Below this is a section titled "Choose a library or item:" with the identifier "BIB.N.027444" and a "Send" button. At the bottom, a copyright notice reads "(c) 2010 Universiteitsbibliotheek Gent,".

Here we reused an  
in-house  
developed web  
application...

Boopsie supports  
ALEPH hold  
requests

# RSS Feeds...

.. BASE E 10:49 68 %

Back UGent Libraries

UNIVERSITEITSBIBLIOTHEEK GENT

- Library Network  
find a library near you >
- My Account >
- Search the Catalog >
- Infodesk Live Chat >
- Library News >
- UGent Tweets >
- Mobile Databases >

.. BASE E 10:58 71 %

Back find Library News

Library News

- Transcending boundaries in Europe in the Period of the Belle Epoque 2010-04-06T14:44:13Z >
- Erfgoeddag 2010 op 25 april 2010-04-09T13:48:15Z >
- Marleen Temmerman wint Life Achievement Award British Medical Journal 2010-03-11T10:03:30Z >
- Demo's endnote en reference manager in april 2010-03-11T08:17:23Z >
- België werkt mee aan het realiseren van de Europese Open Access-pilot: OpenAIRE 2010-03-02T14:00:35Z >
- Het Open Access tijdschrift PlosOne wordt nu ook geïndexeerd in Web of

# UGent Library tweets...

... BASE E 10:49 68 %

Back UGent Libraries

UNIVERSITEITSBIBLIOTHEEK GENT

- Library Network  
find a library near you >
- My Account >
- Search the Catalog >
- Infodesk Live Chat >
- Library News >
- UGent Tweets >
- Mobile Databases >

... BASE E 10:58 72 %

Back find tweets

Tweets  
for "from:ugentbiblio OR #ugent"

- Wie gebruikt er een smartphone voor zijn UGent-mail?  
#mobilevikings #UGent  
2010-04-22T08:13:41Z
- Lezing 'Is Religion an Evolutionary Adaptation?':  
<http://bit.ly/cchFn4> #ugent  
2010-04-22T06:54:06Z
- Agenda: Lezing 'Is Religion an Evolutionary Adaptation?'  
<http://bit.ly/bK0KXR> #ugent  
2010-04-22T06:54:04Z
- Gents Universitair Koor presenteert Carmina Burana  
<http://bit.ly/dAjwaM> #ugent  
2010-04-21T16:33:23Z
- P.Smet was niet slecht, alleen heeft sp.a tegenwoordig blijkbaar oplossingen, terwijl ze

# Summerus: mobile db's

.. BASE E 10:49 68 %

Back UGent Libraries

UNIVERSITEITS BIBLIOTHEEK GENT

- Library Network  
find a library near you >
- My Account >
- Search the Catalog >
- Infodesk Live Chat >
- Library News >
- UGent Tweets >
- Mobile Databases >



.. BASE E 11:01 73 %

Back UGent Libraries

UNIVERSITEITS BIBLIOTHEEK GENT

UGent Libraries Mobile Databases

- Google >
- Africa Wide Nipad  
VPN connection needed >
- aip scitation  
Install the 'iResearch' application from the app store >
- arxiv Install the 'Arxiv' application from the appstore >
- avery index to architectural periodicals  
VPN connection needed >
- cinahl  
VPN connection needed >
- ebscohost academic search >

# Admin Interface

Documents Web Reader more ▾

docs Search Docs Search

Upload...

My folders > demo Share this folder

Share Move to Folders

	Name
<input type="checkbox"/>	Demo TOC
<input type="checkbox"/>	Demo Locator
<input type="checkbox"/>	Demo Reading List

YESTERDAY

EARLIER THIS WEEK

name  
ame  
me  
me  
me  
be ▾  
nes ▾  
  
up  
sie  
o  
red with me

NAME

YESTERDAY

Demo TOC

EARLIER THIS WEEK

Demo Locator

Demo Reading List

# OC (sub) menus

ar Documents Web Reader more ▾

[Old version](#) | libservice@ugent.be | Settings

docs Demo TOC Private to me + 2 more

Updated 24 hours ago by libservice

Saved

View Insert Format Form Tools Help

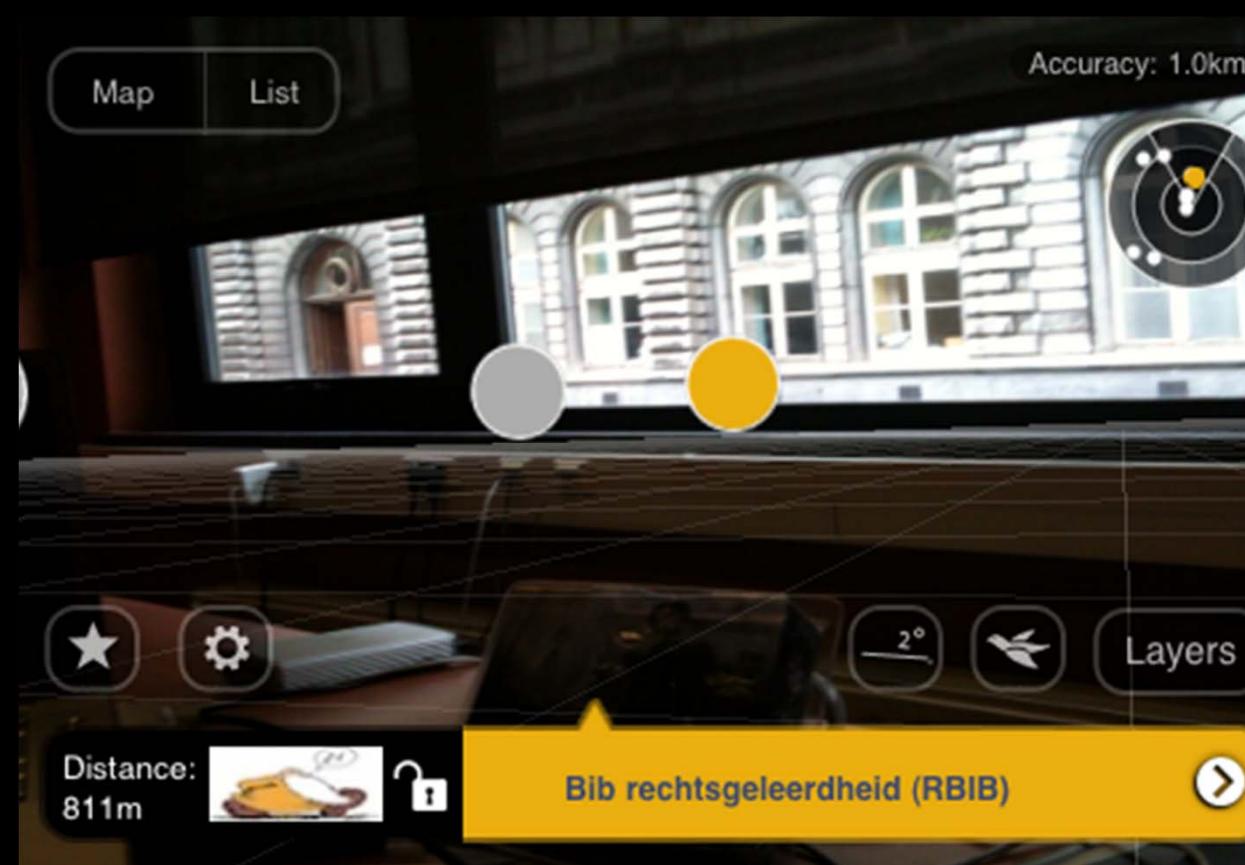


A	B	descriptor
<a href="#">.ugent.be/~phochste/images/book.png</a>	text	i:/i/do
<a href="#">.ugent.be/~phochste/images/mobile.png</a>	My Reading List	<a href="#">http://</a>
<a href="#">.ugent.be/~phochste/images/twitter.png</a>	Mobile Library	twitte
<a href="#">.ugent.be/~phochste/images/home.png</a>	Ghent Tweets	i:/i/do
<a href="#">.ugent.be/~phochste/images/layar.jpg</a>	My Locations	layar:
	Virtual UGent	

The screenshot shows a Google Sheets document titled "Demo TOC". The menu bar includes "View", "Insert", "Format", "Form", "Tools", and "Help". The toolbar below has icons for file, print, search, and other functions. The main content is a table with three columns: A, B, and descriptor. Column A contains URLs to various UGent images. Column B contains descriptive text for each URL. Column descriptor contains the corresponding iDocID or URL. A tooltip is visible over the first row of the table.

A	B	descriptor
<a href="#">.ugent.be/~phochste/images/book.png</a>	text	i:/i/do
<a href="#">.ugent.be/~phochste/images/mobile.png</a>	My Reading List	<a href="#">http://</a>
<a href="#">.ugent.be/~phochste/images/twitter.png</a>	Mobile Library	twitte
<a href="#">.ugent.be/~phochste/images/home.png</a>	Ghent Tweets	i:/i/do
<a href="#">.ugent.be/~phochste/images/layar.jpg</a>	My Locations	layar:
	Virtual UGent	

# OC in Vanilla Interface



# Reading list

Documents Web Reader more ▾

[Old version](#) | libservice@ugent.be | Settings

docs Demo Reading List Private to me + 2 more

Updated 3 days ago by libservice

Saved

View Insert Format Form Tools Help



A	B	C	D	E	F	G
	Title	Author	Call Number	Description	Picture	Series
488328	Information rules : a strategic guide to the network economy	Shapiro, Carl; Varian, Hal R	BIB.BUREAU.0.07	X, 352 p.	<a href="http://lib.ugent.be/~phochste/images/shapiro.jpg">http://lib.ugent.be/~phochste/images/shapiro.jpg</a>	Information Technology
201487	COMMON LISP : the language	Steele, Guy	T80.05.02.135	xxiii, 1029 p. ; 24 cm.	<a href="http://lib.ugent.be/~phochste/images/lisp.jpg">http://lib.ugent.be/~phochste/images/lisp.jpg</a>	Information Technology
1222708	The Java language specification	Gosling, James; Joy, Bill; Steele, Guy	W20.BUR.120.006	xxv, 505 p. ; 24 cm.	<a href="http://lib.ugent.be/~phochste/images/java.jpg">http://lib.ugent.be/~phochste/images/java.jpg</a>	Information Technology
124112	The mythical man- month : essays on software engineering.	Brooks, Frederick	T56.CT035	XI, 195 p.: ill.	<a href="http://lib.ugent.be/~phochste/images/brooks.jpg">http://lib.ugent.be/~phochste/images/brooks.jpg</a>	Information Technology
1017738	The inmates are running the asylum	Cooper, Alan	BIB.N.031331	xxvi, 255 p. : ill. ; 24 cm.	<a href="http://lib.ugent.be/~phochste/images/cooper.jpg">http://lib.ugent.be/~phochste/images/cooper.jpg</a>	Information Technology

# Reading list: Vanilia interface

■■■ BASE E 15:21 100% 🔋

Back <type here>

**Reading List**  
Demo Reading List

**Information rules : a strategic guide to the network economy**  
Shapiro, Carl; Varian, Hal R  
BIB.BUREAU.0.07

**COMMON LISP : the language**  
Steele, Guy  
T80.05.02.135

**The Java language specification**  
Gosling, James; Joy, Bill;  
Steele, Guy  
W20.BUR.120.006

**The mythical man-month : essays on software engineering.**  
Brooks, Frederick P

■■■ BASE E 15:21 100% 🔋

Back <type here>

Information rules : a strategic guide to the network economy

**Information Rules**  
A Strategic Guide to the Network Economy  
CARL SHAPIRO AND HAL R. VARIAN

**Information rules : a strategic guide to the network economy**  
Shapiro, Carl; Varian, Hal R

**Series**  
Information Technology

X, 352 p.

**Call number**  
BIB.BUREAU.0.07

**Place on hold**

# RESULTS

- 4 months, 3 persons:
  - 2 system librarians :  $2 \times 0.1$  FTE
  - 1 project manager:  $1 \times 0.1$  FTE
- Costs: ~ 4 weeks paying a programmer
- Some work to synchronize library addresses (250). Setup the hold request link. Testing on iPhone, HTC and Nokia.
- More work in color schemes to use, icons, etc...

# ACKNOWLEDGEMENTS

- Frank Vandepitte - UGent Library
- Patrick Hochstenbach - UGent Library
- Omar Reygaert - UGent Library
- Gary Fletcher - Boopsie Inc

# Sources

- MorganStanley "The Mobile Internet Report"  
[http://www.morganstanley.com/institutional/techresearch/mobile\\_internet\\_report122009.html](http://www.morganstanley.com/institutional/techresearch/mobile_internet_report122009.html)
- Gartner News  
<http://www.gartner.com/it/page.jsp?id=1421013>
- Student Smart Phone Survey - Winter 2009  
<http://clm.ucdavis.edu/pubs/survey/student-w09-2.html>
- TU Delft Mobile Survey Results  
<http://www.slideshare.net/wfvanvalkenburg/tu-delft-mobile-survey-results>
- The Mobile Internet is Bigger Than You Think  
<http://www.slideshare.net/grigs/the-mobile-internet-is-bigger-than-you-think>
- The Web Is Dead. Long Live the Internet  
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