

Creating Engaging Mobile Experiences

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<http://www.mobilesenegal.com>

What Makes the Mobile Medium So Unique?

- Ubiquity
 - “Always on, always with you”
 - Access to internet
 - 350 billions SMS sent in the US in 2008
- Accessibility
 - Everything can be accessed from a mobile phone (e.g., Web and videos)
- Connectivity
 - Staying connected to a social circle at all times
- Location sensitivity
 - Pinpoint a user within 100 meters based on cell triangulation
 - Location-based services will be crucial in the future
 - Where is the user?
 - What points of interest are nearby?
 - How does the user go to where she / he needs to go?

Examples of Applications

- Ringtones, wallpapers, musics, videos, pictures
- Creating political uprisings
- Enabling interactive TV
- Making mobile payments
- Distributing information via Bluetooth
- Bringing content to mobile phones using QR codes
- Taking pictures with mobile phones, text them to a short code and get the URL of a mobile Web site
- Google SMS to 466453 for local business listenings, sport scores, stock quotes...
- Amazon's textbuyit SMS to 262966 to get product specifications

Modes of Communication

- Mobile to mobile
- Web to mobile
- Mobile to Web
- Print to mobile (e.g., QR codes)
- Broadcast to mobile
- Radio to mobile

Small Screens

- Different input modalities
- Different screen sizes
- Different capabilities
 - Flash, movies, pictures
- Different user expectations
- Different user behaviors



Global Mobile Market

- Handsets
 - More than 5000 types of handsets
- Carriers with own governing laws and regulations
- Data plans or prepaid subscribers (credit)
- Applications and services development

Global Mobile Market

- USA
 - Engagement in mobile content and downloading applications
 - Experience with 3G
- Latin America
 - 12% of the population has mobile phones
 - 6 times the PC penetration
 - Brazil is the 5th mobile market in the world
- Asia Pacific
 - Japan uses a higher-speed transmission protocol for content (W-CDMA)
 - More emails than SMS, Flash support, QR codes, TV
 - South Korea has a very successful mobile game market
 - India has the lowest mobile Internet penetration rate in the region. It is famous for outsourcing of mobile development
- Europe, Middle East and Africa
 - Less carriers than in other parts of the world
 - UK and Spain are the largest mobile markets in Europe
 - Africa is the fastest growing market

Technologies

- SMS/MMS
- Mobile web sites
- IVR (Interactive Voice Response)
- Bluetooth
- Widgets and applications (e.g., Java, Flash Lite, Python, C, and C++)
- QR codes

Web-to-SMS



Communicator

Welcome: christelle

Balance: [234.9](#)

Buy SMS Credits

LOGOUT

Home

Messaging

Inbox

Address Book

My Settings

Billing

Message Reports

Help

Compose Message

[Compose Message](#)
[Message Preferences](#)

COMPOSE MESSAGE

[Mobile Number Format](#)

To:

Selected Contacts

-
-
-
-

Message:

Chars: (160/SMS)

[\[Advanced\]](#)

My Two-way

Activating your Two-Way account allows your recipients to reply to the text message.

[De-activate](#) My Two-Way

Mobile Web

- <http://mtld.mobi/>
 - Services to enhance the mobile web experience
- Check if your Web site will appear well and fast on a mobile phone
 - http://ready.mobi/launch.jsp?locale=en_EN

Christelle SCHARFF

Home

Dr. Christelle Scharff is associate professor of computer science at [Pace University, Manhattan, NY](#). She obtained her PhD in Computer Science from the [Henri Poincaré University of Nancy](#) in France under the supervision of [Dr. Claude Kirchner](#) and [Dr. Christopher Lynch](#) and did her research at [LORIA](#) and [INRIA Lorraine](#).



Her PhD is in **automated deduction** and **theorem proving**. Automated deduction and theorem proving study programs that automatize reasoning. The main applications of automated deduction and theorem proving are software and hardware verification. Proofs on software are crucial in that they provide assurance of correctness that cannot be obtained using testing techniques.

In the recent years her interest is in the development and implementation of graph-based decision procedures for special domains (e.g. congruence closure, lists). [SirHCA](#), an open source little engine of proof for the empty theory, the theory of lists and the theory of encryption, has been released in July 2008.

In the last years she has also been involved in global software engineering and mobile application development.

In 2008-2009 Dr. Christelle Scharff is on sabbatical and traveling between the US, France, Senegal and Cambodia.



Page results

Username: Password:

Use your mobiForge sign-in - [Sign up@mobiForge](#) - [Lost password](#)

URL tested: <http://www.csis.pace.edu/~scharff>

<http://www.csis.pace.edu/~scharff>

1

Overall

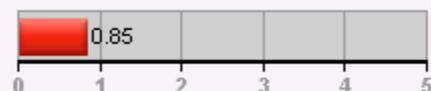
BAD

It will definitely display very poorly on a mobile phone.

Your mobi.readiness score is calculated from the results displayed below. Failing tests and large page sizes both lower the score. Read through the report to understand how to improve your score - and your site.

Readiness, Size, Time & Cost

Score



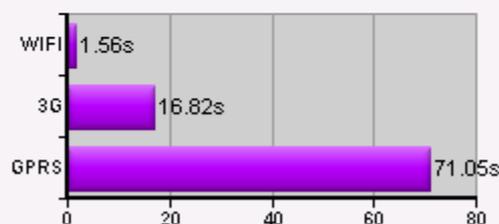
Size



Estimated cost



Estimated speed



About this report



Ready.mobi uses industry standard tests developed with the W3C and leading mobility companies.

Ready.mobi provides an analysis of how your web content is likely to function on a mobile device.



Many tests performed by ready.mobi are defined by the W3C in the [MobileOK Basic Tests 1.0](#) document.

More testing?



[Back to start page](#)

[Retest this page](#)

Test another page

Feedback



How useful did you find this report?

Visualisation

(Note: these emulators use their own device specific HTTP headers and therefore may receive a different page than that tested by the report)

Select a device

- Nokia N70
- Samsung z105
- Sony Ericsson k750i**
- Motorola v3i
- Sharp GX-10



Test summary

 10 Passes  4 Warnings  12 Fails  1 Comments

(include email for a reply)

GO

[Bugs / discuss](#) [Request a feature](#)

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Ready to go live?

If you're mobi ready why not get your site listed in the worldwide [.mobi site directory?](#)

Other domains

You might also be interested in these domains

Additional tests

(Click name of tests to see more detail in the panel below)

- | | | |
|--------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------|
| <input checked="" type="radio"/> MIME types | <input checked="" type="radio"/> Objects or scripts | <input checked="" type="radio"/> Access keys |
| <input type="radio"/> Character encoding | <input type="radio"/> Auto refresh | <input type="radio"/> Caching |
| <input type="radio"/> Pop up windows | <input type="radio"/> Redirection | <input type="radio"/> External resources |
| <input type="radio"/> Alt texts | <input type="radio"/> Default input mode | <input type="radio"/> Structure |
| <input type="radio"/> Image maps | <input type="radio"/> Provide defaults | <input type="radio"/> Image Resizing |
| <input type="radio"/> Specify image sizes | <input type="radio"/> Page size limit | <input type="radio"/> Google sitemap |
| <input type="radio"/> Measures | <input type="radio"/> Large graphics | <input type="radio"/> Form submit buttons |
| <input type="radio"/> Page title | <input checked="" type="radio"/> Tables | |
| <input type="radio"/> Use of stylesheets | <input type="radio"/> Nested tables | |
| <input type="radio"/> Stylesheets dependency | <input type="radio"/> Tables for layout | |

Text Keyword to Short Codes

- Short codes acts as unique five-digit (or more) identifier code for users to submit specific keywords and data via SMS

QR Codes

- QR codes are codes that can stock 7089 numerical characters and 4296 alphanumeric characters
- QR codes store data, addresses and urls in magazines, signs, buses and business cards
- QR codes are common forms of mobile messaging in Asia
- Require phone equipped with the correct reader software
- QR code generator
 - <http://qrcode.kaywa.com/>



Developing Mobile Experiences

- Knowing the audience and its context
 - Market research and statistics
 - Context (e.g., manufacturers, carriers, laws)
 - How is the audience engaged with handsets? What is its background?...
- Establish architecture and development
 - What are the top handsets in the country?
 - What are the targeted handsets?
 - What are the characteristics of the handsets?
 - Are they appropriate for the initiative and approach?
 - What environment development to use?
 - What language to use?

- Design for the audience
 - Does the project follow standards of mobile UI design?
 - Is UI appropriate to the user?
 - How to fulfill user's expectations?
- Use a rigorous quality assurance process
 - Test on device emulators and handsets with different carriers
 - Test for correctness
 - Test for usability
 - Verified / signed applications

References

Strategic Mobile Design, Creating Engaging Experiences. Joseph Cartman and Richard Ting. New Riders