

The Web2.0 / App Guide

Ideas for tools that could be used in the IBSE modules

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March 2014

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IRRESISTIBLE is a project on teacher training, combining formal and informal learning focused on Responsible Research and Innovation.

This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 612367.

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Introduction

The aim of this guide is to offer you a brief overview of tools that might be useful for Inquiry Based Science Education (IBSE). In total, there's more than two million apps around, so it's not the problem that the app you are searching for is not out there, the challenge is to find it. If you ever used a smartphone, you will know that apps have very different qualities, and prices. Our goal for this guide was to find useful apps for the different tasks of IBSE. The main tasks were defined as

- Project organization
- Searching for Knowledge
- Measuring data
- Processing data
- Taking notes and working on data
- Sharing and publishing results

For each section, we searched tools that satisfied the criteria we defined beforehand:

- The tool should work
- The tool should be available on both major operating systems (or at least a similar app should be available)¹, so you could use a mixed set of handhelds in the classroom. Another option would be a web based tool, being accessible with any device's web browser.
- The tool should be free (although apps usually are not really expensive, we feared the effort – if you use student's own phones – of making your (underage) students buy an app for)
- The tool should not be cluttered with nasty advertisements. Although we see that programmers need some revenue to live from, it should not hinder you using the app. Thus you'll find several apps showing ads, but in a decent way.

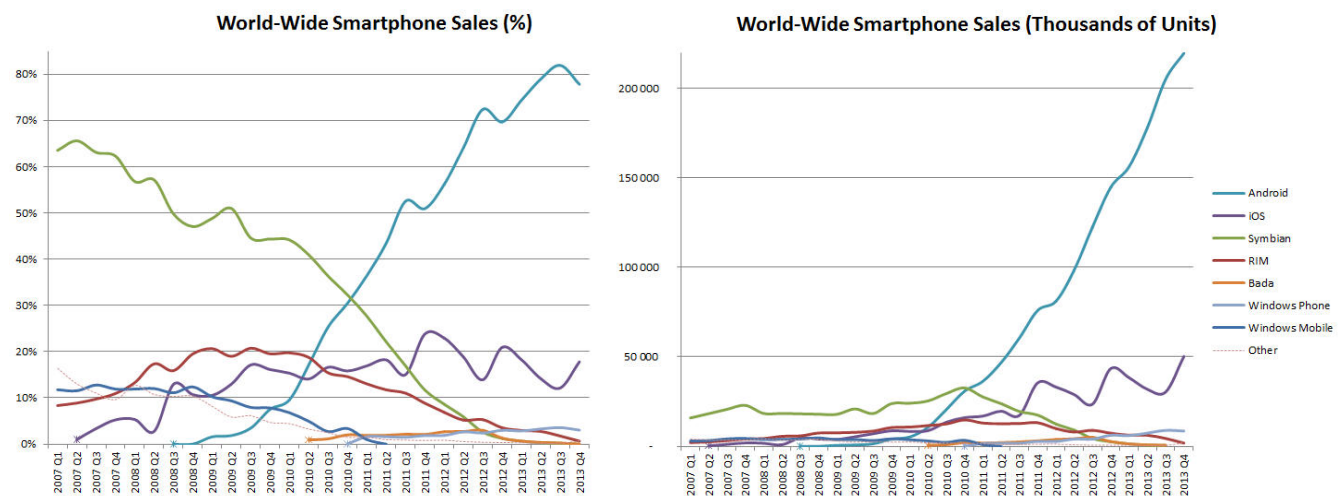
Since the pace of the app market is incredible fast, this guide is only to be seen as a snap-shot from early 2014. Some tools will stay for quite a while; others might disappear in a few months. And new, better ones will show up. But in general, if you know from this guide that there is a tool for this or that, it will be easy to find a replacement.

In the following, a brief listing of relevant facts and figures on mobile devices:

¹ Some apps with the same name, even from the same author, have greatly varying functionality in the version for different operating systems. Check out or at least have it in mind when setting up the tasks for your students...

Smartphone sales

In 2013, almost 1 billion of smartphones was sold worldwide, a growth of 42.3 percent from 2012. Android is by far the most widely used operating system with over 78 percent of smartphones sold in 2013 running Android, followed by iOS with a 16 percent market share, and Windows Phone reaching three percent.²

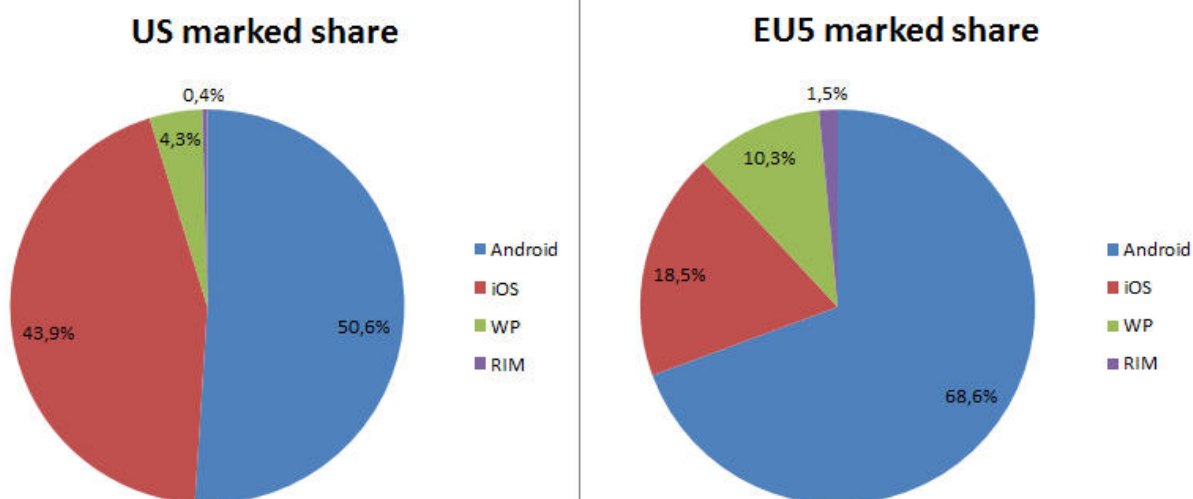


Worldwide smartphone sales in percent and in thousands of units. In the last quarter of 2013, almost 220 million Android smartphones and 50 million iOS devices were sold. Windows Phone with about 8.5 million units sold is slowly growing, but still far off the two big players.³

The tablet market is somewhat similar, with almost 200 million tablet computers sold in 2013 (whole year). Android has a share of almost 62 percent, iOS about 36 percent, and Windows about 2 percent.

Smartphones in use

Looking at smartphones in use today, the operating systems shares are ordered in the same way as sales, but differ significantly between the US and Europe.



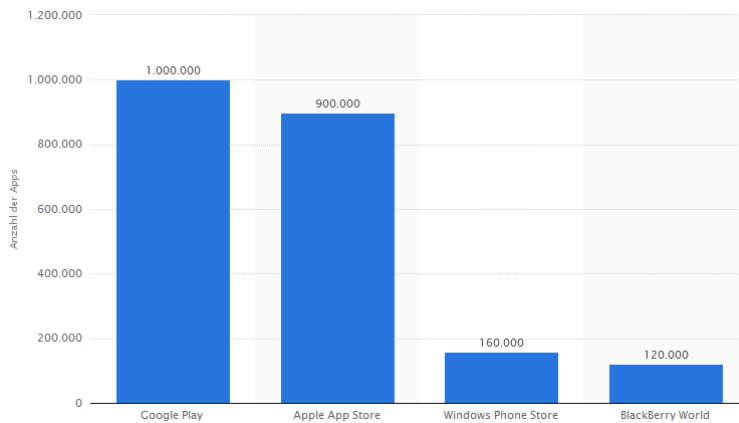
Smartphone OS marked share in quarter 4, 2013; EU5 includes: France, Germany, Italy, Spain, and United Kingdom; Source of data: Kantar Worldpanel: ComTech Smartphone OS market share (% of smartphones) Region

² Source: Gartner research, <http://www.gartner.com/newsroom/id/2665715>

³ Source: Data: Gartner research; Graphs: Wikipedia

Number of apps offered for the different OS

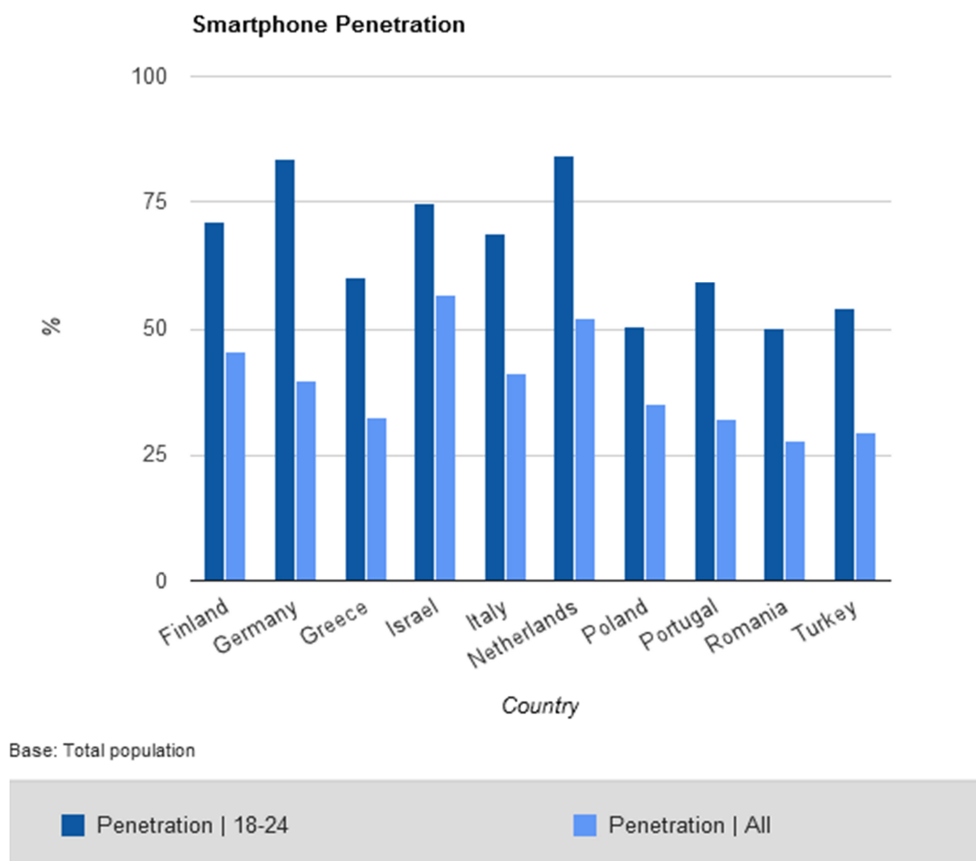
More than 2 million apps are accessible through the official app stores.



Apps offered in the official stores Google Play (Android), Apple App Store (iOS), Windows Phone Store (WP), and Blackberry World (RIM). Data of July 2013; Source and graph: Statista.

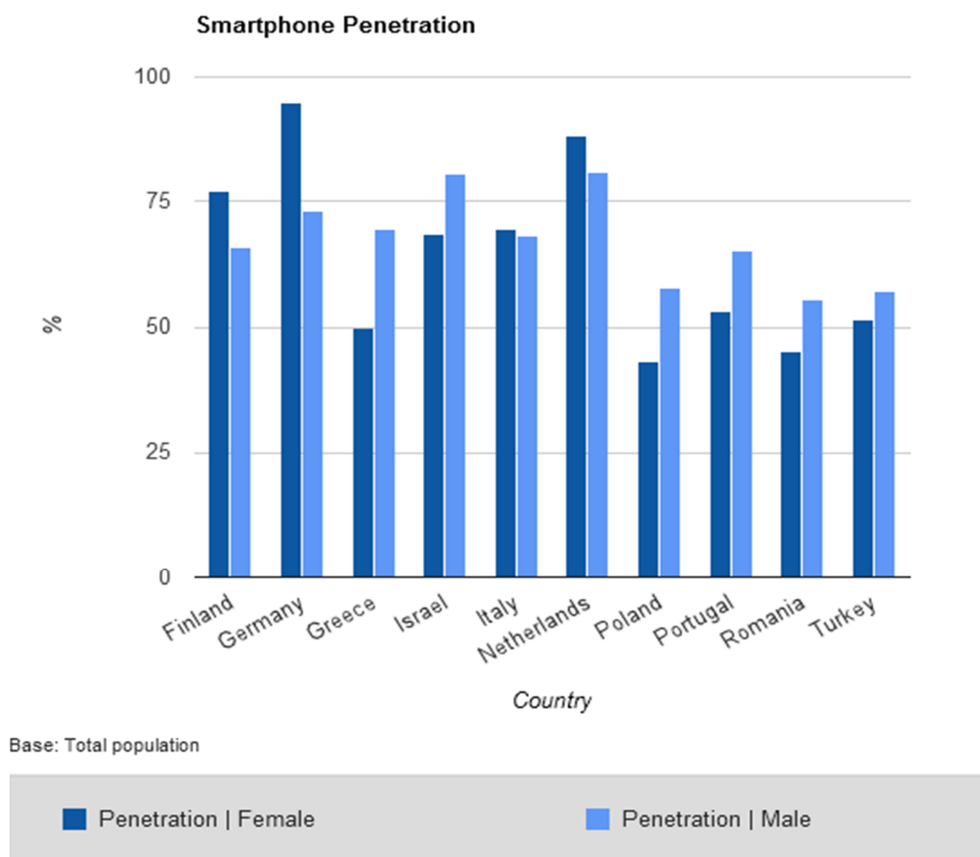
Smartphone users

Europe has an average general smartphone penetration of less than 50 percent, but in the age group closest to that relevant for our project the penetration is about 60 percent, i.e. at least every second student owns a smartphone. The penetration rate varies between the countries, age groups and gender. Here are a two graphs made from Google's Our Mobile Planet report⁴, all dated 2013.



⁴ <http://think.withgoogle.com/mobileplanet/en/> - you can create your own custom made data charts!

Smartphone penetration by gender (Data from Google's Our Mobile Planet report as well):



App catalogue

The following section offers you the core facts for each tool we chose: The title, the operating system, price, author, a very brief description of what it is, and a few screenshots for you to have an idea how the tool looks like. Where applicable, we also named an alternative solution for use, sometimes with a different operating system, sometimes a different tool with a similar functionality. In general, the app stores (with different success) offer you further options with tools that should have comparable functionality.

A little hint for Android users: When searching the Google Play Store using your Android device, it'll only show you the apps working on your device. If you search for tools in general, use your browser to get the full program.

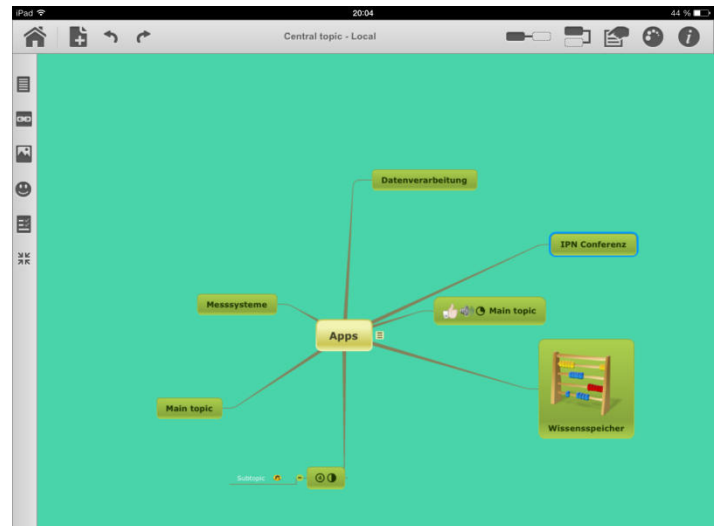


Mindomo
Mind mapping

Project Tools

Operating system(s): Android, iOS
Language: English
Price: free; Author: Expert Software Applications Srl
Alternative solutions: Simple Mind + (iOS) / Simple Mind Free (Android)

Collect all your thoughts (not only text, but also photos, URL's, audio, etc.) in a mind map and share them with your friends. Mindomo is easy to use and versatile in the incorporation of different data formats. It also allows to do interactive presentations and to work together with others on the same map.



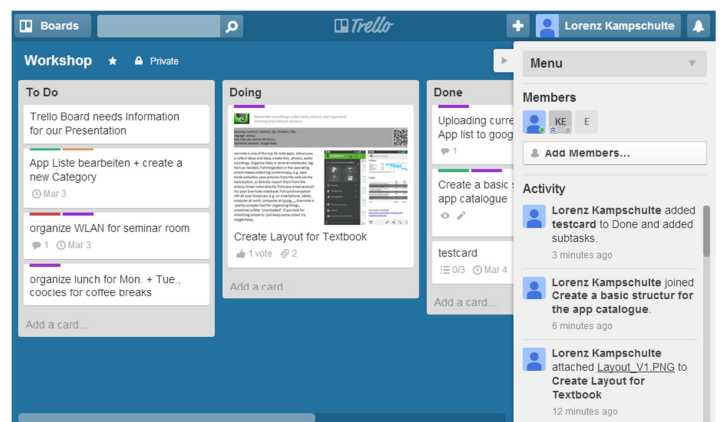
Trello

Organize a project, keep track of progress, work on tasks collaboratively

Project Tools

Operating system(s): Android, iOS, Browser
Language: English
Price: free; Author: Fog Creek Software
Alternative solutions: Hojoki - Project Management (Android/iOS)

Trello helps you to create the organizational structure of your project. Create lists, e.g. 'ToDo', 'Doing', 'Done', 'Things-to-remember', ... Create single tasks (called cards), add photos, checklists, mark them with different colors, schedule them, ... Structure the cards in the lists, according to project progress. Invite coworkers to participate in the board, to create their own tasks, to comment tasks and mark project progress in the tasks.





UTGreat

Interactive and collaborative video-whiteboard

Project Tools

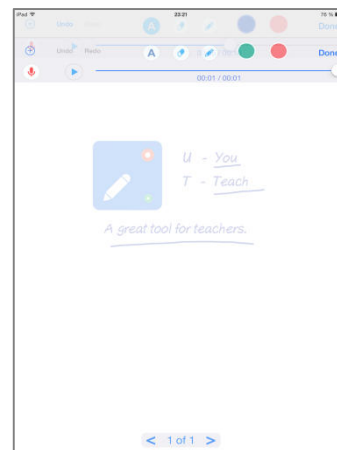
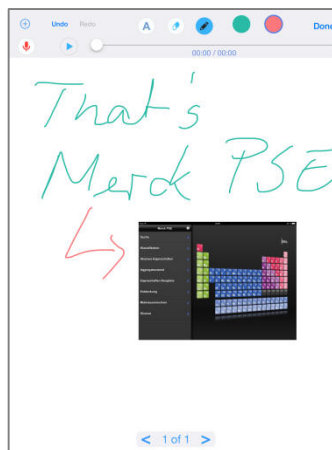
Operating system(s): Android, iOS

Language: English

Price: free; Author: Yuansheng Chen

Alternative solutions: Papyrus Natural Note (Android)

UTGreat is a tool for creating and sharing whiteboard content. You can create whiteboards containing sketches, text, photos and even videos. Sharing them with other UTGreat users is easily done by creating a link or QR-code.



Board cam Standard

Live notes as virtual 2nd layer on a running experiment

Project Tools

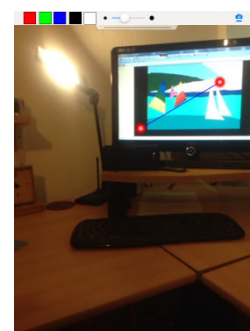
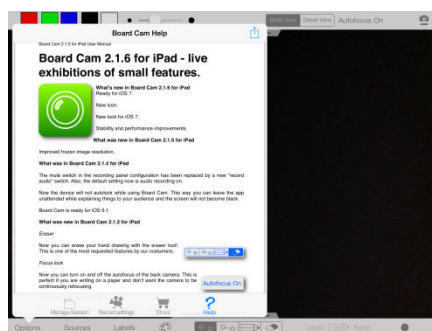
Operating system(s): iOS

Language: English

Price: free; Author: Juan Luis Herrera Cortijo

Alternative solutions: -

Board Cam allows you to make notes directly on the video recorded by the camera. This allows for instance to do an experiment with a ball rolling down a slope and stopping at different positions at each run. You can mark the end position and see how they differ. The screen can be transferred to a projector, so students can follow even in a classroom.





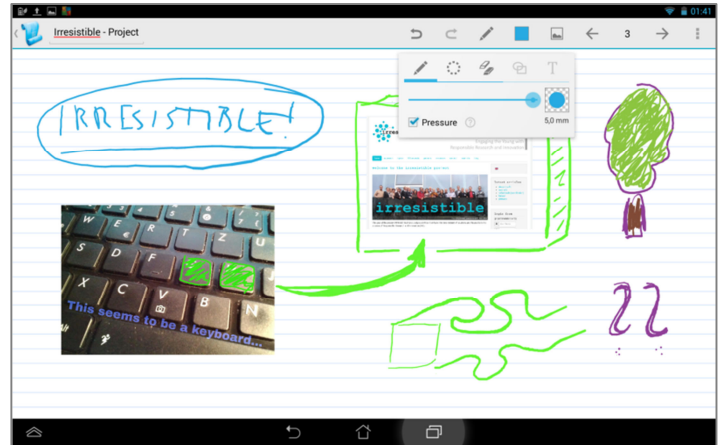
Papyrus Natural Note

Scetchbook style note app with easy export

Project Tools

Operating system(s): Android
Language: English
Price: free; Author: Steadfast Innovation, LLC
Alternative solutions: UPAD lite (iOS)

Papyrus Natural Note is an easy to use App for sketching and creating simple collages, include photos (+ cut, rotate, ...). Create different scetchbooks with several pages. Very acute finger / pen pressure recognition allows elegant sketching (depends also on the touchscreen of your device). Export single pages or whole sketchbook in .pdf, .png or .jpg format



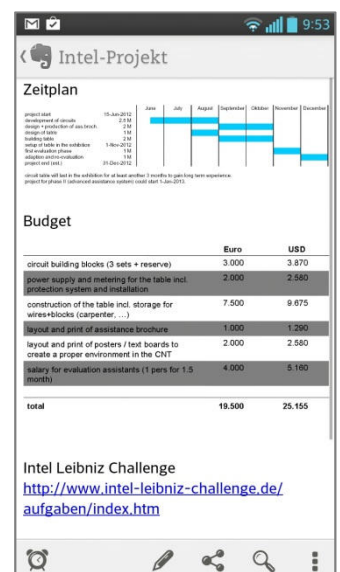
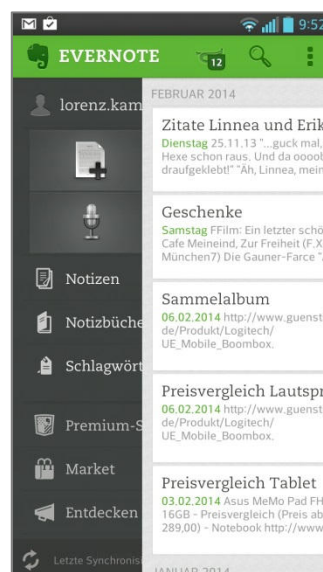
Evernote

Remember everything: collect data, store it, and organize it.
(sharing only with pro version)

Project Tools

Operating system(s): Android, iOS, Windows, Mac
Language: various
Price: free (pro version 40,-€ p.a.); Author: Evernote
Alternative solutions: Google Keep (Android/iOS)

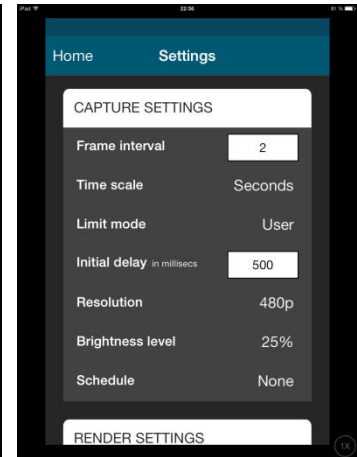
Evernote is one of the top 10 note-taking apps. Allows you to collect ideas and data, create lists, photos, audio recordings. Organize Data in several notebooks, tag them as needed. Full integration in the operating system makes collecting content easy, e.g. save whole websites, save pictures from the web via the share button, or directly import them from the camera. Email notes directly from any email account into your Evernote notebook. Full synchronization with all your instances, e.g. on smartphone, tablet, computer at work, computer at home, ... Evernote is a pretty complex tool for organizing things, sometimes a little 'overloaded'. If you look for something simple to 'just keep some notes' try Google Keep.





Operating system(s): Android, iOS
Language: English
Price: free; Author: Interactive Universe
Alternative solutions: Droid Timelapse (Android)

Lapse It is a tool to create time lapse or stop motion movies. Take photos every few seconds, and render them to a movie. So you can follow a 1h sunrise in 3 minutes. Or you can investigate the movement of a sunflower head during a sunny day. Or, with lots of time (and an extra smartphone) follow seedlings growing. If you don't want to use your phone for longer term experiments, theres a lot of webcam based time lapse tools for your computer, or have a look at your photo camera, quite a few have a time lapse function integrated (see e.g. en.wikipedia.org/wiki/Time-lapse_photography for a start)

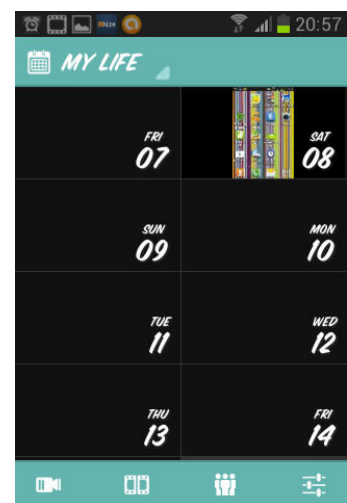
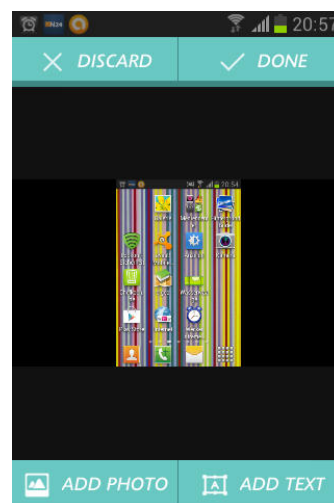


1 Second Everyday

Imagine a movie that includes every day of the rest of your life'

Operating system(s): Android, iOS
Language: English
Price: free (for 1 Month, then 0.89€); Author: Cesar Kuriyama
Alternative solutions: 1 Second Daily Cam (iOS)

Track processes over a longer period of time: Trees getting green in spring, or track the view out of your window over a full season. This App allows you to create multiple timelines in a Video that you can share and save via Google Drive.





PicsArt

All in one image processing app

Image Work

Operating system(s): Android, iOS
Language: various
Price: free; Author: PicsArt
Alternative solutions: Pixlr Express (Android/iOS)

PicsArt is one of the best photo-editing programs for smartphones and tablets, offering a large number of features. Create sketches from scratch, use a photo and rework it, include it in a collage. Share your work in various ways, inside the community or via Twitter and Facebook etc. The camera module included allows to record an interval series of photos, e.g. for tracking a chemical reaction on minute scale and comparing the different states.

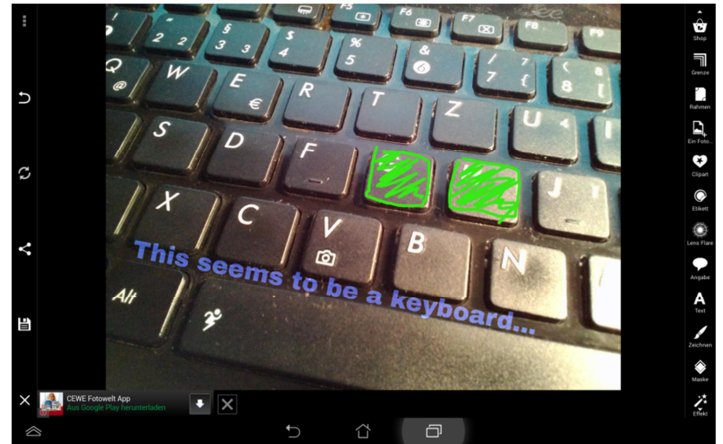


Photo Ruler ABC

Measure your surroundings

Measuring

Operating system(s): iOS
Language: English
Price: free; Author: QL Software
Alternative solutions: Camera Ruler / ON 2D Measure (both Android)

With Photo Ruler ABC you can easily measure dimensions from mm to m scale. It works by including a reference object like a coin, a CD/DCD or DIN A4 paper, into the photo (on the image plane to be measured). The photograph is then referenced to that object and you can measure dimensions. Great for documenting different sized objects, e.g. beetles found on a field trip, or tracking the growth of plants.





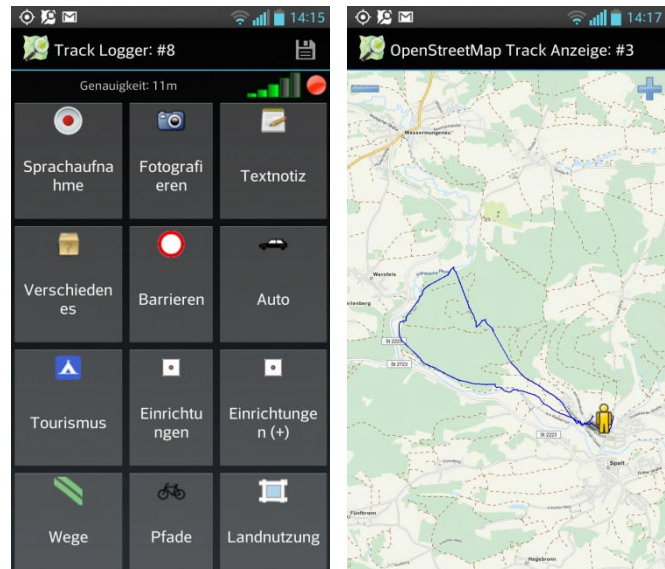
OSMTracker

Track your way

Measuring

Operating system(s): Android
Language: English
Price: free; Author: Nicolaus Guillaumin
Alternative solutions: My Tracks / GPS-Tracks (both Android/iOS)

With OSMTracker you can log a route you have taken with GPS, e.g. while hiking, cycling, or on a scientific field trip. OSM tracker allows you to add points of interest (PoI) alongside the track, e.g. text messages, markers, photos, audio recordings, ... The recorded tracks can be shown in the app, or exported in .gpx format, allowing the further work on them with a multitude of programs (e.g. Google Maps, Google Earth, and many add-ons that build on them).



iMetalBox free

Measurement tool box

Measuring

Operating system(s): iOS
Language: English
Price: free; Author: Tue Nguyen Minh
Alternative solutions: Smart Tools Werkzeuge (Android)

iMetalBox is a tool box including different measuring devices build on the sensors of your smartphone. iMetalBox includes a Flashlight, Stoppwatch, Spirit Level, Ruler, Protractor, and a Compass. Smart tools for Android is a comparable collection (the full collection is a pay app, but you can download all tools as stand alone measures for free). Be aware that the measuring results are highly influenced by the type of smartphone you use (i.e. the sensors and electronics therein).





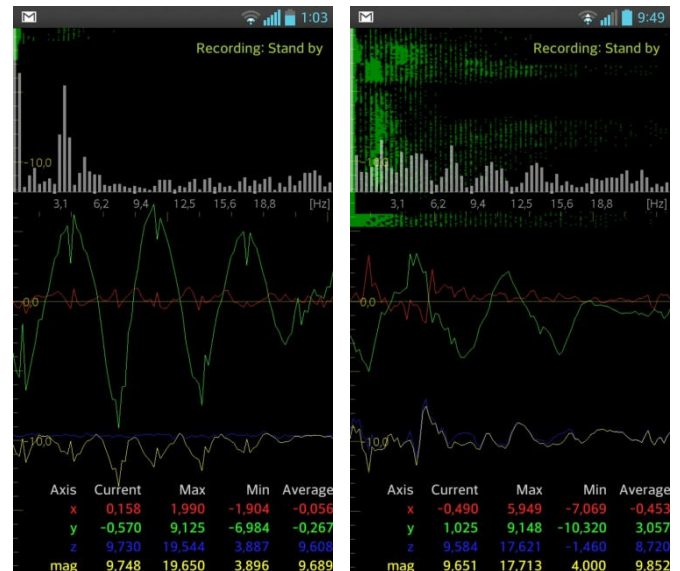
Accellogger

Use the internal acceleration sensors of your smart device

Measuring

Operating system(s): Android, iOS
Language: English
Price: free; Author: Sora Takayama
Alternative solutions: Sensor Kinetics / Sparkvue (both Android/iOS)

Accellogger is a tool to log the signals of the accelerometers build in your smartphone. Accellogger reads out the accelerations in all three spatial directions (x,y,z in m/s^2), shows them in different ways on the screen and writes them alongside with a time stamp to a simple text file on the phone. With this app you could e.g. track the maximum acceleration of elevators, vibrations of a car on different roads, or your walking frequency. The App Sensor Kinetics shows more results derived from the accelerometer and other sensors in your phone, like gyroscopoe, magnetometer, rotation, and light sensor. Data export is possible with Pro version only (0,76€). Sparkvue is usually meant to be used with external sensors, but works with internal sensors as well (iOS is free).



Oscilloscope

Dual channel oscilloscope w/o extra hardware

Measuring

Operating system(s): Android
Language: English
Price: free; Author: UberApp
Alternative solutions: iMSO Oscium (iOS, needs additional hardware, ~ 270 €)

This App is a simple dual channel storage oscilloscope. It uses either the internal microphone or some device (microphone) connected to the headphone/mic plug as input. Combine it with a function generator (e.g. the app FuncGen Signal Generator (Crescendo)) and/or a Fourier spectrum analyzer (e.g. the app FFT Spectrum Analyzer (UberApp)) and you'll have an easy set up for simple sound experiments. But be aware that smartphone speakers and microphones are far from perfect tools, especially due to signal transformations build in to increase speech quality...





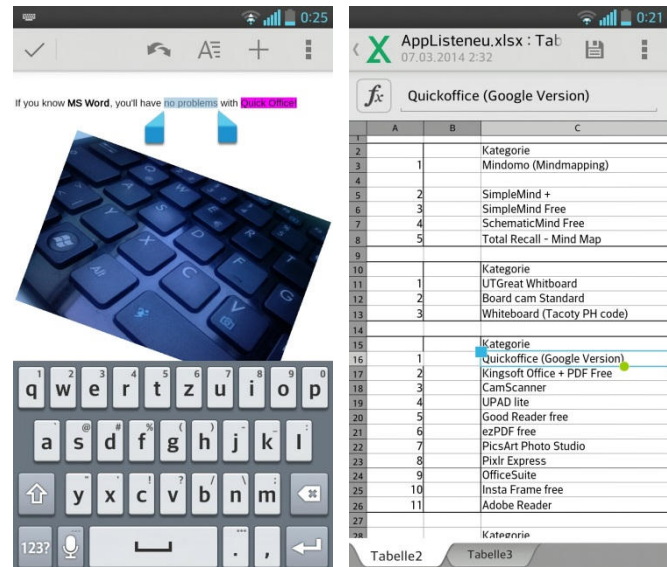
Quickoffice (Google Version)

A free mobile office solution that works

Mobile Office

Operating system(s): Android, iOS
Language: various
Price: free; Author: Google Inc
Alternative solutions: Office Suite (Android/iOS)

A free, simple and working office solution for smartphones and tablets. Although more special functionalities of Microsoft Office are not supported, it allows you to work with general documents and shows standard formatted tables, text and slides mostly correct (which many mobile office versions don't do). Easy sharing and collaborating due to synchronization and sharing functions of Google Drive.



CamScanner - Phone PDF Creator

Smart and intelligent document administrator

Mobile Office

Operating system(s): Android, iOS
Language: various
Price: free (pro version 4,49 € per month); Author: IntSig Information Co., Ltd
Alternative solutions: Foxit PDF Camera + Foxit MobilePDF (Android)

Scan documents, whiteboards, blackboards, pictures, ... with your smartphone camera and directly create .pdfs out of it. Nice tool for cutting the page area and increasing readability. The free version can export/share as .jpg without, or as .pdf with a watermark on the lower end of the page. The OCR function allows to search the scanned .pdfs, although not perfect. Automatic upload to different Cloud spaces, multiple ways of sharing the documents and comments, with the possibility of others commenting the shared documents in the same document.





UPAD lite

Give your notes a new level

Mobile Office

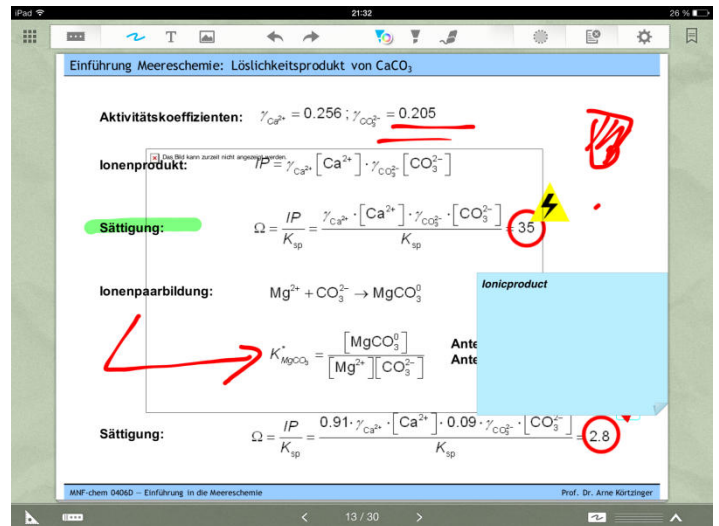
Operating system(s): iOS

Language: English

Price: free (up to 5 documents, pro version 4,49 €); Author: PockeySoft

Alternative solutions: Papyrus Natural Notes as notepad, Foxit MobilePDF as pdf annotation tool (both Android)

The main part of UPAD is a notepad, for taking text and sketch notes. Good handwriting recognition. Also allows to annotate PDF and to decorate photos. Export of pdf to different cloud services.



Google Docs

Simultaneously working on the same (web-)documents

Collaborative work

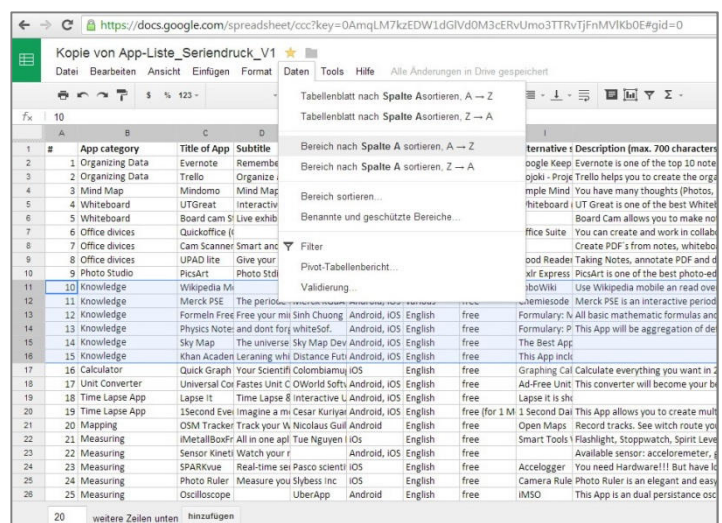
Operating system(s): Browser

Language: various

Price: free; Author: Google Inc.

Alternative solutions: Zoho Office Suite (www.zoho.com)

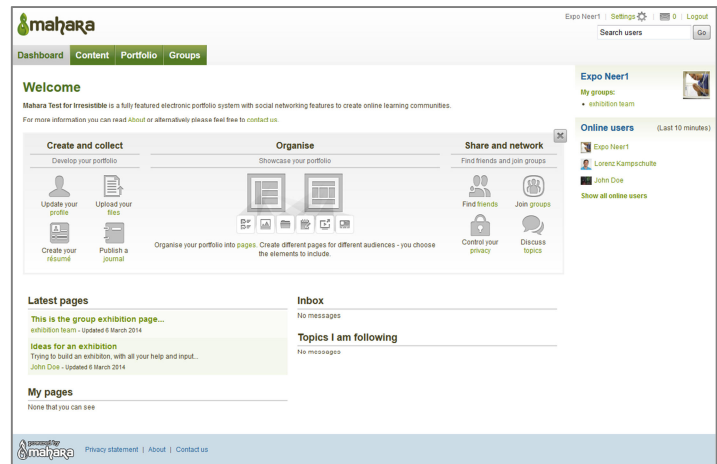
Easy to use office applications accessible via web browser (Chrome works best). Good integration and accessibility from mobile systems, simple sharing, 15Gb of free Cloudspace. With Google Forms it's easy to create (online) questionnaires and analyze them. Teams can collaboratively work on the same document at the same time. Gmail account is needed.





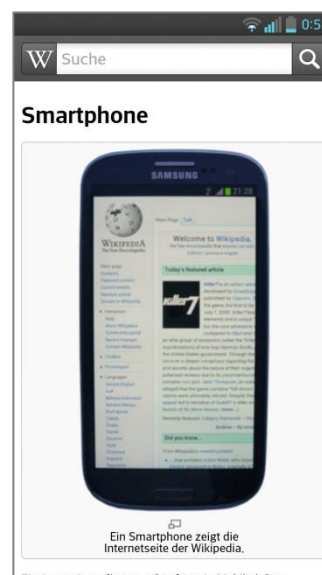
Operating system(s): Browser, Upload tools for Android (MaharaDroid) and iOS (PortfolioUP!)
 Language: various
 Price: free; Author: Mahara Open Source Community
 Alternative solutions: -

Mahara is an ePortfolio system that is explicitly developed as learner centered system to form a Personal Learning Environment (in contrast to Learning Management System (LMS) like Moodle). It offers a dazzling array of functionalities, with the core being an ePortfolio system and a shielded social network with tools as journals (private/internal), a blogging tool, easy to program (drag-and-drop) web pages (private/internal/external), collaborative work pages, a resume builder, ... Mahara can be used as stand-alone system or be integrated in a larger network, e.g. with it's 'sister' application Moodle. It usually needs a Linux Server (Ubuntu, Debian), but can also be run on most shared webhosting and Windows systems.



Operating system(s): Android, iOS
 Language: various
 Price: free; Author: Wikimedia Foundation
 Alternative solutions: LoboWiki (Android)

Use Wikipedia mobile and read over 20 million articles. Save articles to read later offline, search articles nearby. Share articles (links) in various ways. On aged phones, the app is much faster than using a browser.





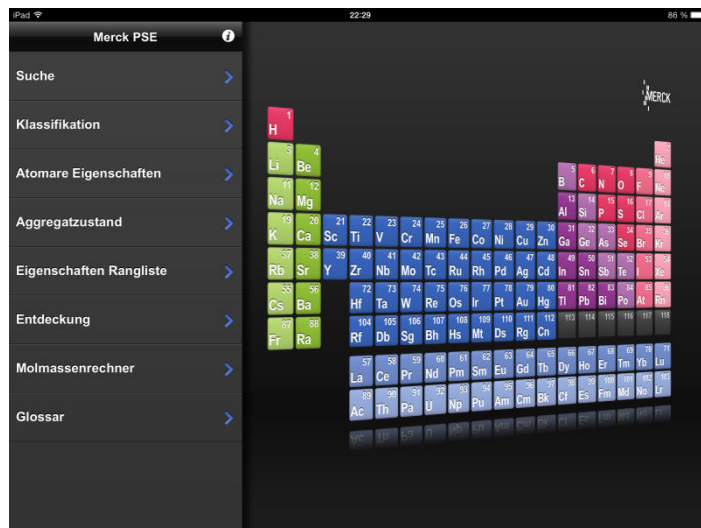
Merck PSE

The periodic table, presented in a nice way

Knowledge

Operating system(s): Android, iOS
Language: various
Price: free; Author: Merck KGaA
Alternative solutions: Chemisode (iOS)

Merck PSE is an interactive periodic table with a clean and friendly design. Besides all relevant information usually part of a periodic table, the app includes element features, images, history of discovery, melting and boiling point – you even have a view of the PSE indicating the state of matter of each element at a given temperature. Further the app offers an integrated molar mass calculator. All content is stored within the app, after download no internet connection necessary (due to legal restrictions this app is named EMD PTE in North America).



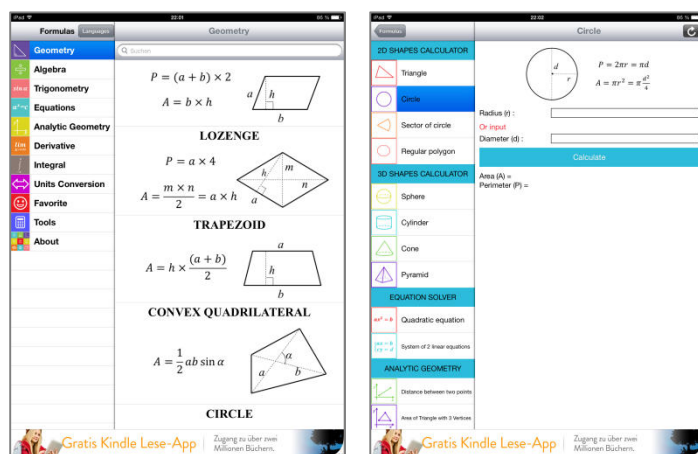
Formulas Free

All math fomulas in your pocket.

Knowledge

Operating system(s): Android, iOS
Language: English
Price: free; Author: NSC Co.
Alternative solutions: Formulary: Math Free (Android/iOS)

The app Formulas Free contains all basic mathematic formulas and many helpful gadgets like calculating the surface area or solving roots/equations. It also includes a simple unit converter. You can share every formula with friends via email, message or facebook.





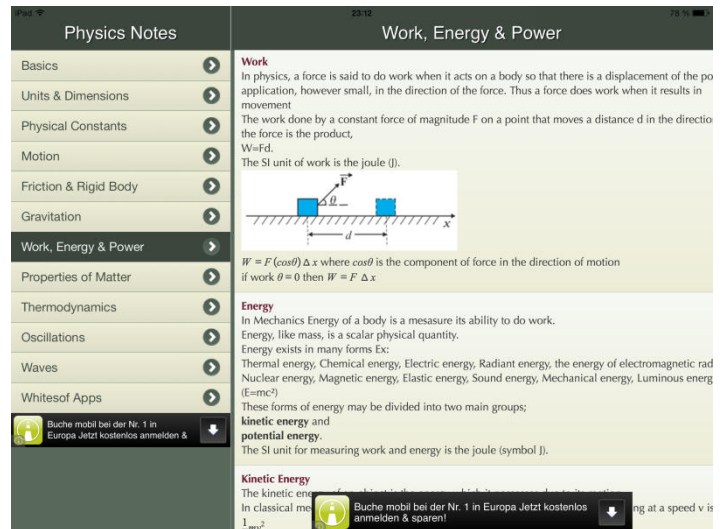
Physics Notes

Physics formulary and text book

Knowledge

Operating system(s): Android, iOS
Language: English
Price: free; Author: whiteSof.
Alternative solutions: Formulary: Physics Free (iOS)

This app is an aggregation of definitions and formulas in basic physics knowledge, somewhere between fomulary and text book. Part 1 contains e.g. basics of physics, units, dimensions, physical constants, classical mechanics, ... Part 2 (separate app 'Physics Notes 2') contains e.g. electricity, magnetism, electromagnetic waves, ray optics, ...



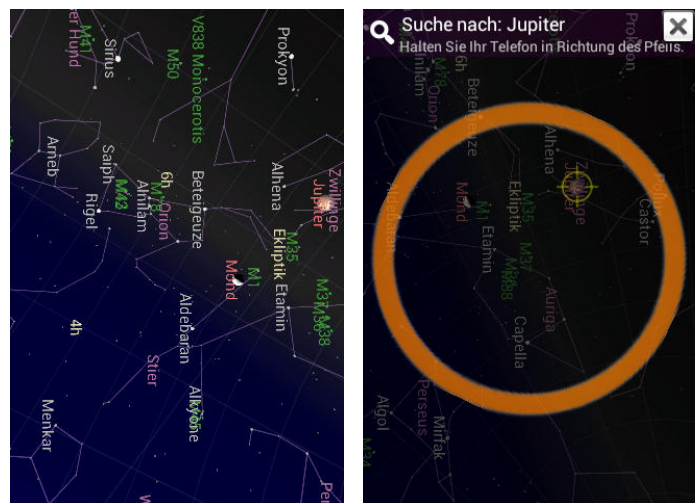
Sky Map

The universe in your pocket

Knowledge

Operating system(s): Android, iOS
Language: English
Price: free; Author: Android: Sky Map Devs, iOS: Mobius Entertainment
Alternative solutions: -

The app offers you navigation through the night sky. It works in two modes: Point your phone to any star or constellation, and it will offer you the solution on the screen. Or search for a star or constellation in the menu, and let you guide to the object of desire.





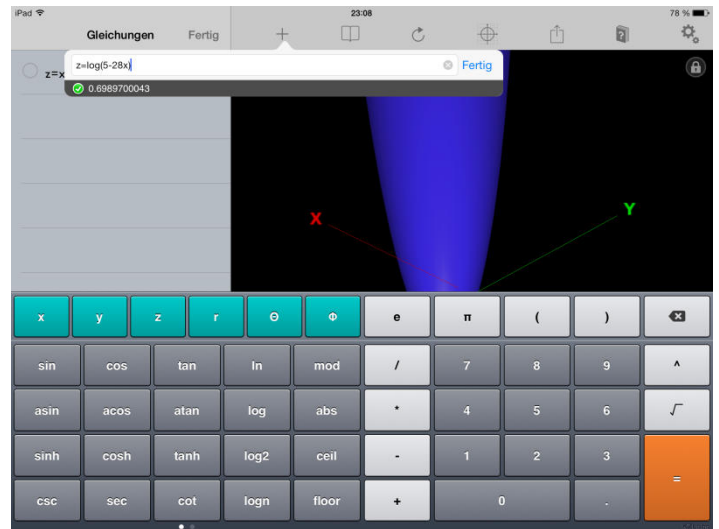
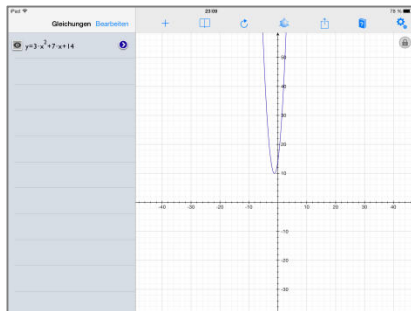
Quick Graph

Capable scientific graphing calculator

Tools

Operating system(s): iOS
Language: English
Price: free; Author: Colombiamug
Alternative solutions: Graphing Calculator (Android)

This scientific graphing calculator offers 2D and 3D equation plotting with wireframe and solid visualization. Supports cartesian, polar, cylindrical and spherical coordinate systems. Includes a library for commonly used equations.



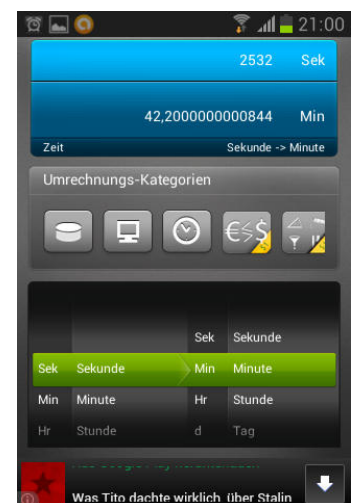
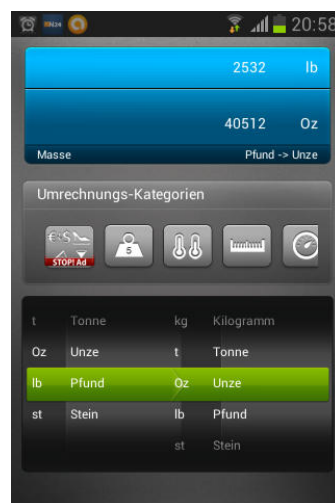
Universal converter free

Easy to use unit converter

Tools

Operating system(s): Android, iOS
Language: English
Price: free; Author: OWORLD Software
Alternative solutions: Ad-Free Unit-Converter (iOS)

Universal Converter free is a clearly designed and easy to use app for converting various units. The free app includes e.g. mass, speed, volume, distance, time, temperature.

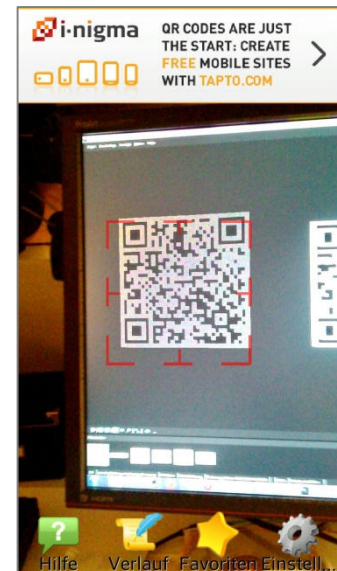




Operating system(s): Android, iOS
Language: English
Price: free; Author: 3GVision
Alternative solutions: Barcode Scanner (Android)

Barcode reader for various code formats, e.g. 1D and 2D codes like QR, DataMatrix, EAN 13 and UPC . Works fast and also pretty well when codes are in bad condition or at low light.

[referring the ad shown here: Tapto.com offers a system that allows to easily create simple mobile sites accessible through QR codes for free. This might also be an solution for use in your exhibition project. For details visit www.tapto.com.]



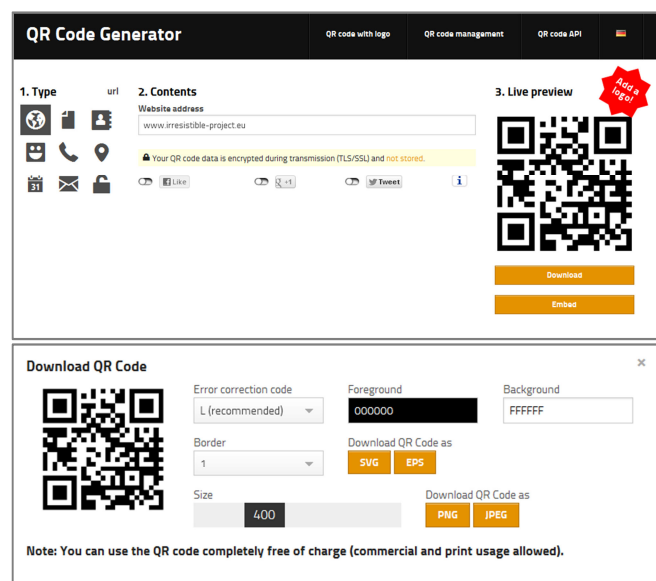
QR Code Generator



Create various QR-codes (www.goqr.me)

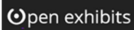
Operating system(s): Browser
Language: English
Price: free; Author: ARSAVA GmbH & Foundata GmbH GbR
Alternative solutions: www.i-nigma.com/CreateBarcodes.html

Create 2D barcodes online. Offers different content formats, e.g. text, URL, vcard, telephone, geolocation, WLAN access data, ... Create codes with a resolution of up to 1000x1000 Pixel, download as .png, .jpg, .svg, .eps files. Different colors are possible, unlimited use, no ads.



Open Exhibits PLAYER

Exhibition



Author/Edit multitouch, multi-user exhibits in CML, GML and CSS
(www.openexhibits.org)

Operating system(s): Windows, Mac OS
Language: English
Price: free; Author: Ideum
Alternative solutions: -

Edit and adapt a multitouch surface without deeper programming skills. The OE Player works comparable to a web browser interpreting XML-based mark-up language and cascading style sheets (CSS). By changing the XML files you can adapt the content, by adjusting the CSS files you can change the look. (OE Player requires Adobe AIR and Windows OS)

Open Exhibits Player 1.1

The Open Exhibits Player allows you to develop exhibits without programming. Like a web browser, the OE player can read XML-based mark-up (CML) and cascading style sheets. Simply edit and load CML files through the player.

The Open Exhibits Player requires [Adobe AIR](#) and Windows OS.

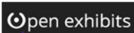


Authors / Editors

[Download OE Player \(PC & Mac\) 1.1](#)

Open Exhibits SDK

Exhibition



Develop multitouch, multi-user exhibits and components
(www.openexhibits.org)

Operating system(s): Windows, Mac OS
Language: English
Price: free; Author: Ideum
Alternative solutions: -

The OpenExhibits Software Development Kit (SDK) allows you to easily program your own multitouch application. The Kit is written in ActionScript. Adobe Flash and Adobe AIR are supported. The OE SDK allows you to develop in the IDE of your choice, but Open Exhibits officially supports the following IDEs: Flash Professional CS5+, FlashDevelop, Flash Builder.

Open Exhibits SDK 3.1

The Open Exhibits Software Development Kit is written in ActionScript. It supports both [Adobe Flash](#) and [Adobe AIR](#).

The Open Exhibits SDK allows you to develop in the IDE of your choice, but Open Exhibits officially supports the following IDEs (Flash Professional CS5+, FlashDevelop, Flash Builder).



Developers

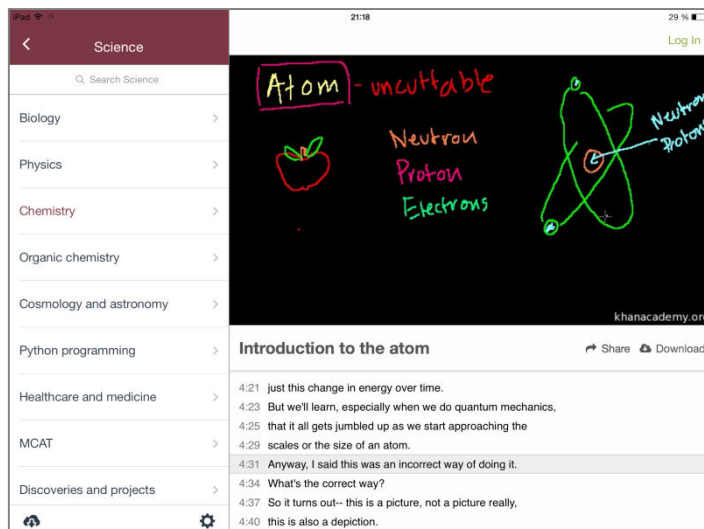
[Download OE SDK \(PC\) 3.1](#)

[Download OE SDK \(Mac\) 3.1](#)



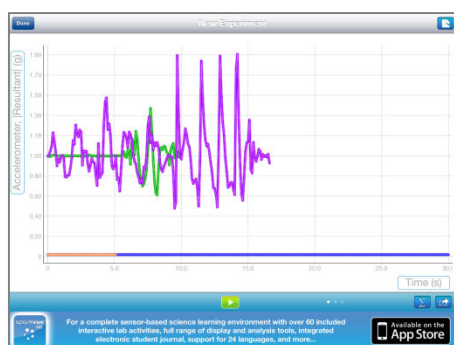
Operating system(s): Android, iOS
Language: English
Price: free; Author: Distance Future
Alternative solutions: -

This app offers a huge collection of video lectures. Topics are e.g. mathematics, science, economics, humanities, etc. Most lectures include experiments, notes, and pictures.



Operating system(s): iOS
Language: English
Price: free; Author: Pasco scientific
Alternative solutions: -

Internal sensors right away, lots of external sensors for measuring various variables. Have a look at:
<http://www.youtube.com/watch?v=rnhKwUVJmKw>



Short Introduction Mahara

This really should just be a very brief introduction to use it in the Web2.0/App Workshop. All information you need you'll find on www.mahara.org. Also, there are many national groups supporting the system and offering tutorials in your language. And you can find a lot of detailed video tutorials on YouTube.

What is Mahara?

Mahara is an ePortfolio system that is explicitly developed as learner centered system to form a Personal Learning Environment (in contrast to Learning Management System (LMS) like Moodle). It offers a dazzling array of functionalities: The core components are an ePortfolio system to present, share and exchange information, including a full file repository with upload possibilities from mobile devices. The second large part is a shielded social network with tools as journals (private/internal), blogs, forums, easy to build web pages (private/ internal/ external), collaborative work pages, a resume builder, and many more. All the content is easily placed on the pages by drag-and-drop, combining internal (Mahara portfolio) and external (web) content on the same pages. Even external blogs can be embedded on internal pages using RSS feeds. Mahara scales nicely on different systems, so you can work on the web interface from your personal computer, laptop, tablet, and smartphone.

Mahara can be used as stand-alone system or be integrated in a larger network, e.g. with its 'sister' application Moodle. It nicely integrates in Moodle, you can e.g. use the same login accounts and manage them in Moodle, and you can directly link from Moodle pages to Mahara pages.

The System Requirements are not immense, but have in mind that traffic and thus machine load scales with the numbers of users. The Mahara standard setup is to run it on an Apache web server installed on a Linux system (e.g. Ubuntu, Debian), it also needs a database (Postgres or MySQL) installed for managing user data and content. Running it on a separate machine will give you the best performance. But it also works on shared webhosting, and on Windows and MAC operating systems. See Mahara.org for details. The design can be widely customized.

Names and Definitions

Artefacts: all data created and/or uploaded to Mahara are called artefacts

View: a view is a collection of artefacts, e.g. a journal, a page, a blog entry, ...

Sharing: sharing of views and artefacts is possible on several levels: no sharing, sharing with one other member (e.g. sending it to your friend, or submitting it to a tutor), sharing with all your friends, sharing with groups, sharing with all members of the Mahara setup, sharing public (i.e. the web)

Groups: can be created by an admin, or autonomous by users (depends on the admin settings what is allowed). Groups can create own (group) pages, repositories, ...

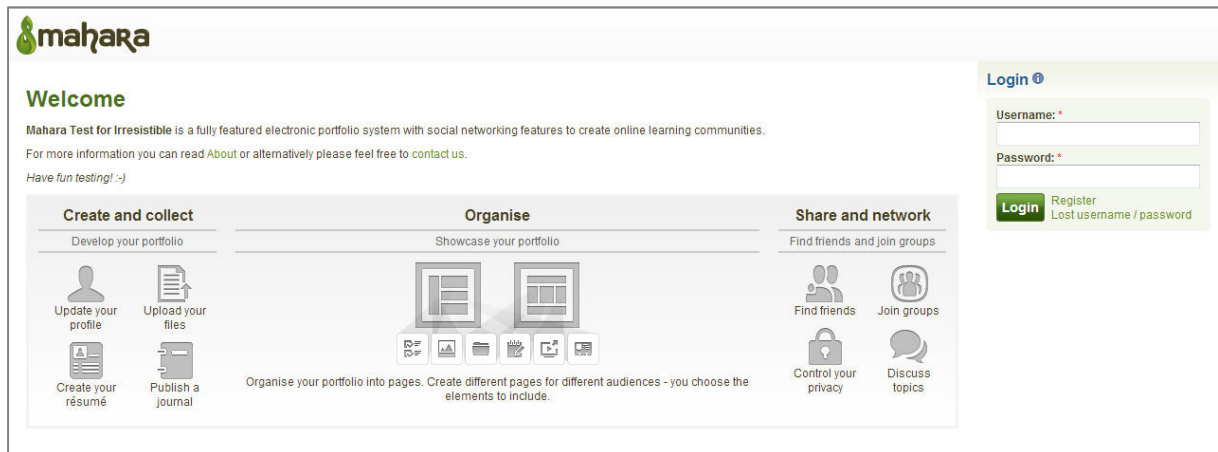
Forums: can be created by an admin, or autonomously by users, can have public discussion or only restricted to defined members (depends on the admin settings what is allowed).

HowTo's

This should allow you to get started with Mahara in the workshop, and to probably explore it a little bit more in detail when you get back home... Mahara Version 1.8 is the base for this manual.

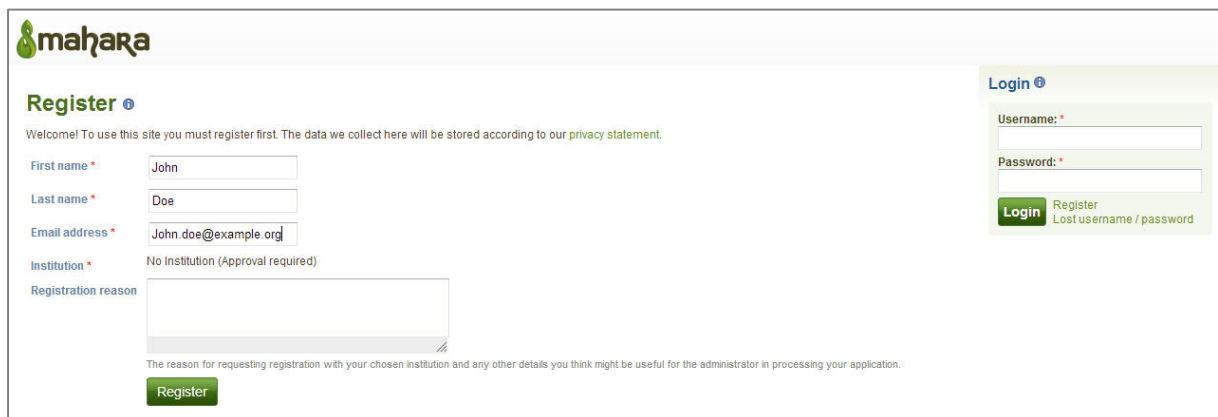
HowTo: Set up an account

Go to the main page www.kampschulte.org/mahara



The image shows the Mahara 'Welcome' page. At the top left is the Mahara logo. Below it, the text 'Welcome' is followed by a description of Mahara as a fully featured electronic portfolio system. There are links for 'About' and 'contact us'. A 'Have fun testing! :-)' message is also present. The main content area is divided into three columns: 'Create and collect' (with sub-section 'Develop your portfolio' containing icons for 'Update your profile', 'Upload your files', 'Create your résumé', and 'Publish a journal'), 'Organise' (with sub-section 'Showcase your portfolio' containing icons for portfolio management and a note about creating different pages for different audiences), and 'Share and network' (with sub-section 'Find friends and join groups' containing icons for 'Find friends', 'Join groups', 'Control your privacy', and 'Discuss topics'). On the right side, there is a 'Login' box with fields for 'Username' and 'Password', and buttons for 'Login', 'Register', and 'Lost username / password'.

Click [Register]



The image shows the Mahara 'Register' page. At the top left is the Mahara logo. Below it, the text 'Register' is followed by a welcome message and a link to the 'privacy statement'. The registration form includes fields for 'First name' (filled with 'John'), 'Last name' (filled with 'Doe'), 'Email address' (filled with 'John.doe@example.org'), 'Institution' (filled with 'No Institution (Approval required)'), and 'Registration reason' (a large text area). A 'Register' button is at the bottom. On the right side, there is a 'Login' box with fields for 'Username' and 'Password', and buttons for 'Login', 'Register', and 'Lost username / password'.

Fill in your data, click [Register].



The image shows a success message on the Mahara website. At the top left is the Mahara logo. At the top right is a 'Login' link. Below the logo, a message states: 'You have successfully submitted your application for registration. The institution administrator has been notified, and you will receive an email as soon as your application has been processed.'

Then the admin will get an email, has to approve the request, then you'll get an email with a link to complete the signup process. Clicking this link will guide you to the a page asking you to create a user name and a password, and the set up your profile (e.g. profile picture, etc.)

mahara Lorenz Kampschulte | Settings | 0 | Logout

Search users Go

Dashboard **Content** **Portfolio** **Groups**

Profile Profile pictures Files Journal Résumé Plans Notes

Profile

About me Contact information Messaging General

Enter your real first and last name here. If you want to show a different name to people in the system, put that name in as your display name.

First name * Lorenz

Last name * Kampschulte

Student ID

Display name

Introduction

Font Family Font Size Paragraph

Path: p

Save profile

Lorenz Kampschulte

My groups:

- exhibition team

Online users (Last 10 minutes)

- Lorenz Kampschulte
- Admin User

Show all online users

Tags

accellogger again

Android data, exhibition, image, measurement, Test, Test blah, testing

HowTo: General site elements

On the Mahara page you have several core elements:

[Dashboard] is you starting / home page, with links to all parts of your Mahara system

The [Content] tab holds all your personal data, e.g. profile, files, journal, resume, plans, notes, ...

The [Portfolio] tab holds all pages and collections you created, and content you share with others. It also gives you export and import options for pages.

In the [Groups] tab you can manage all your contacts: find friends, become member of a group, dismiss membership, create own groups, ...

HowTo: Upload a file

Uploading files is really simple: Go to [Content] → [Files]

The screenshot shows the Mahara web interface. At the top, the user 'Lorenz Kampschulte' is logged in. The main navigation bar includes 'Dashboard', 'Content', 'Portfolio', and 'Groups'. The 'Content' section is expanded, showing 'Profile', 'Profile pictures', 'Files', 'Journal', 'Résumé', 'Plans', and 'Notes'. The 'Files' section is selected, displaying an upload area with a 'Drop files here to upload' message and a 'Create folder' button. Below the upload area is a table listing files:

| Name | Description | Size | Date |
|--------------|-------------|-------|------------|
| images | Image files | | 03/03/2014 |
| MobilUploads | | | 03/03/2014 |
| 13155.jpg | | 62.8K | 03/03/2014 |
| CAM01670.jpg | | 3.8M | 03/03/2014 |

The right sidebar shows user information for 'Lorenz Kampschulte', including a profile picture, groups, quota (5.1MB used of 50.0MB), online users, and tags.

Just drag-and-drop the file on the [Drop files here to upload] field, or use the [Add file] button. In the lower part of the screen you have a list of all your files, can create folders and sort them. Hit the [Edit] button (pen symbol) to add a description and tags for your file.

HowTo: Upload a file with a smartphone app

You can upload files directly by opening Mahara in your mobile browser. But for Android OS as well as iOS there is an app making uploading even easier. A big advantage is that you can store files in the app, and can upload it later if you are back to a free WLAN connection (so save your data plan).

On your Mahara page go to [Settings] (upper right corner), and at the end of the page enter a [Mobile upload token]. This could be a very simple ID like "Mahara" or your name for the first connection, every time uploading artefacts the system will change the token and then use more secure codes (like the one shown here in 2nd line). Hit [Save].

mahara Lorenz Kampschulte | Settings | 0 | Logout

Search users Go

Dashboard Content Portfolio Groups

Settings Notifications

Settings

Delete account

New password

Current password

New password

Confirm password

Change username

New username

The username you use to log into Mahara_Irresistible. Usernames are 3-30 characters long and may contain letters, numbers, and most common symbols excluding spaces.

General account options

Friends control

- ☐ Nobody may add me as a friend
- ☒ New friends require my authorisation
- ☐ New friends are automatically authorised

HTML editor ☒

Disable email ☐

Messages from other users

- ☐ Do not allow anyone to send me messages
- ☐ Allow people on my friends list to send me messages
- ☒ Allow anyone to send me messages

Show controls to add and remove columns when editing a page ☐

Multiple journals ☐

By default, you have one journal. If you would like to keep more than one journal, check this option.

Maximum tags in cloud

Maximum number of tags to display in your tag cloud

Homepage information ☒

Display information about how to use Mahara_Irresistible on the homepage.

Mobile upload token

Mahara2 [x]

3cafe3e2b7ac4e1d560a17 [x]

[x]

Save

Lorenz Kampschulte

My groups:

- exhibition team

Online users (Last 10 minutes)

Lorenz Kampschulte

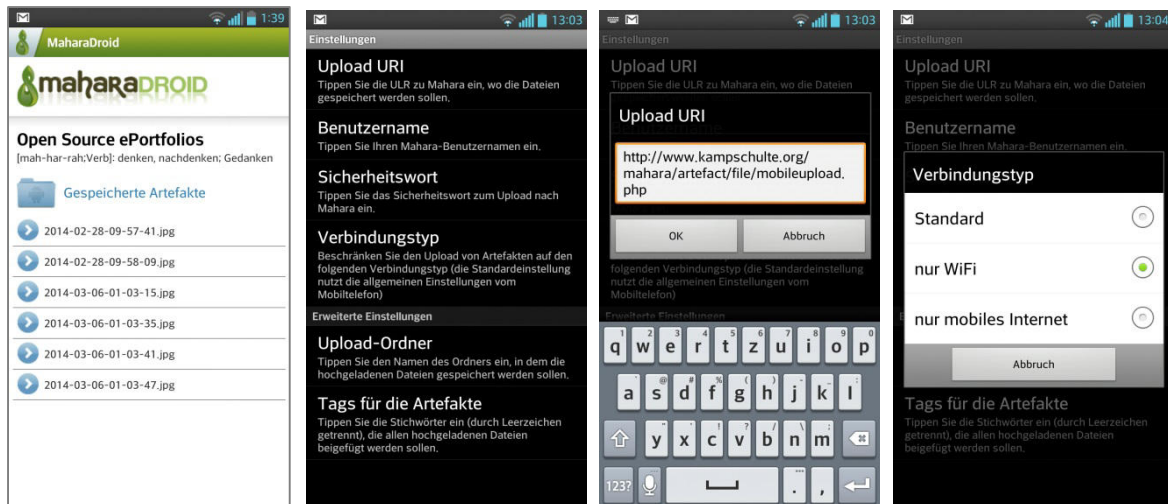
Show all online users

Install the app from the app shop on your phone: MaharaDroid (Android) or PortfolioUP! (iOS)

In the settings dialog of the app, enter the Upload URI as shown below (just change the first part to [http://www.kampschulte.org/mahara...]), enter your user name, and the token you just set on the webpage of Mahara (i.e. "Mahara"). You also can choose which connection type should be used, change to [WiFi only].

Ok, that's all. Close the app.

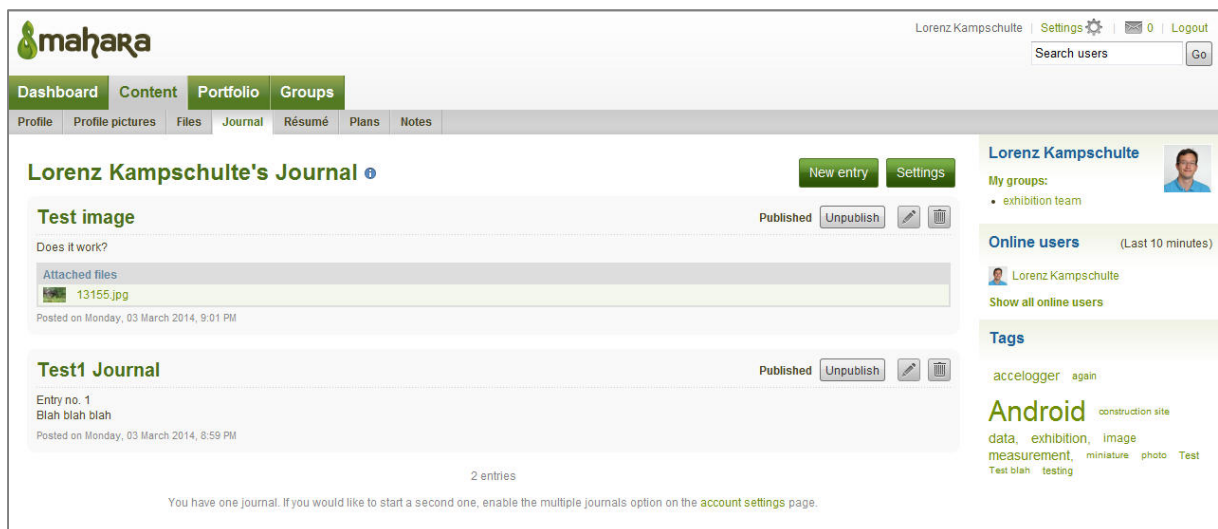
If you are now hitting any sharing button on your device (e.g. in photo gallery), you will have a button called [MaharaDroid] or similar for iOS. If you hit that button you get a dialog to change the file name, description, and to tag it. Then you can directly upload the file, or store it and upload it later, together with other files or when you have decent network.



All files are uploaded to your file repository, into the folder specified in the app, usually called “MobileUploads”.

HowTo: Create a Journal

Go to [Content] → [Journal]. The first journal is already included in the basic settings, you can add further journals.



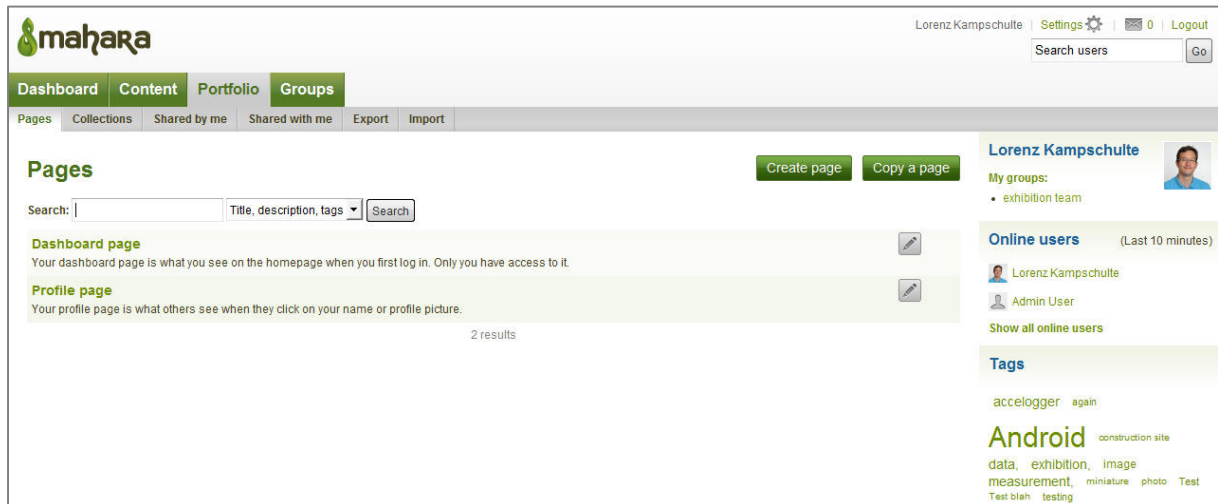
To create an entry, just hit the [New entry] button.

You can change the journal name and add a description as well as tags in the [Settings] menu (the button right next to the button [New entry]).

A journal entry usually contains a title and the entry itself. You could add tags and files as you like.

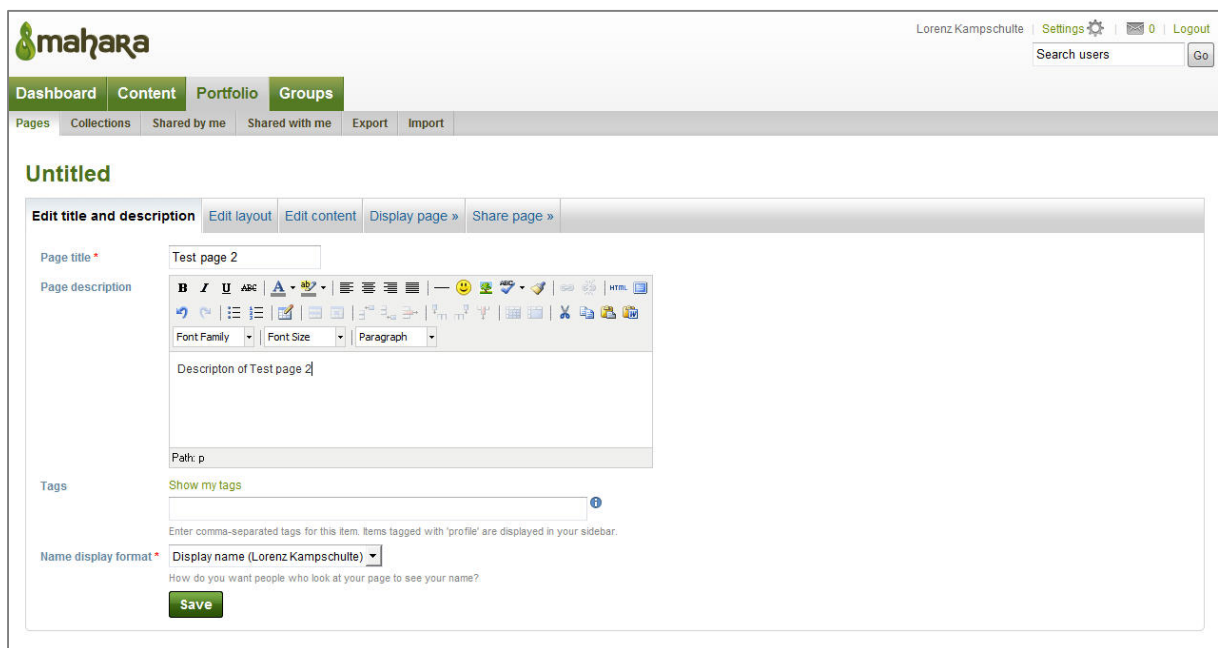
HowTo: Create a Page

Go to [Portfolio] → [Pages]. You can create as many pages as you like.



To create a new page use the [Create page] button on the right. Dashboard and Profile page are installed on every profile. Dashboard page is your (customizable) start page when you log in, Profile page is the page you can design to introduce yourself to other Mahara users in your Setup.

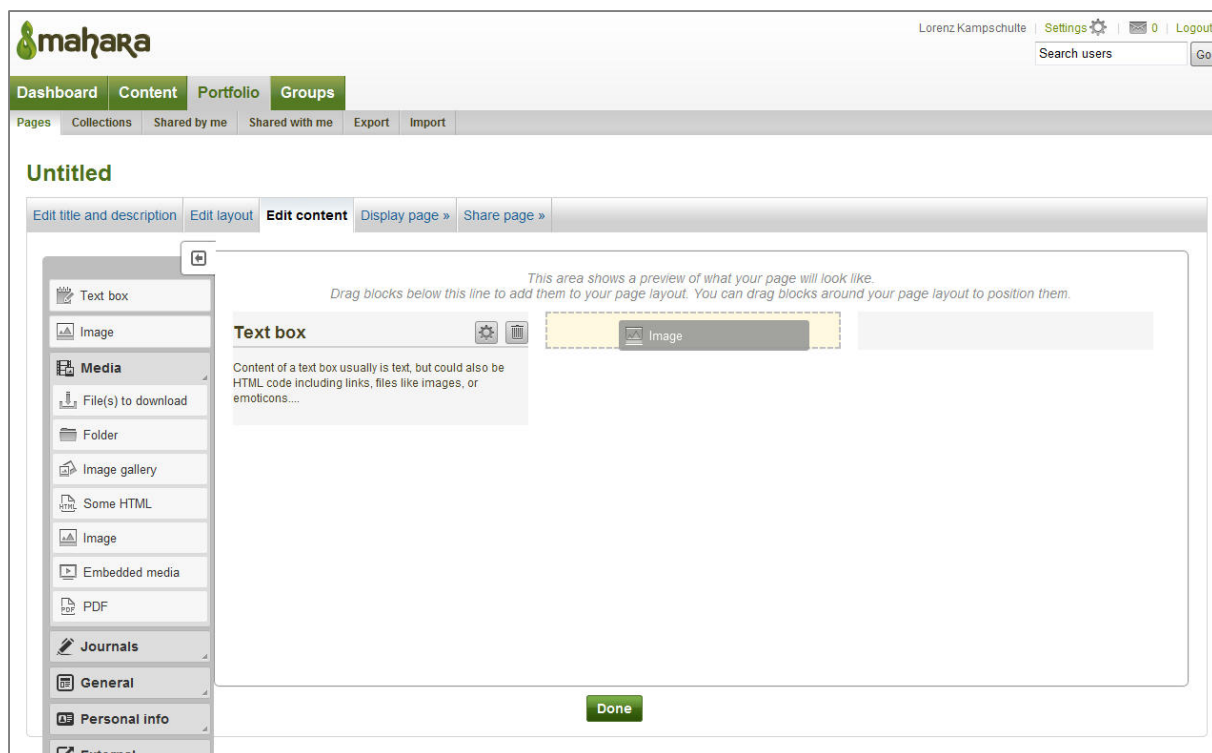
When you start with a page:



Set a page title and a short description of the page. Use the blue tabs for further settings.

Set the layout to the style you need (basically how many columns, rows, ... you can change that later as well).

Add end edit content:



Just drag-and-drop the content placeholders from the menu on the left to your page on the right. If you have specified the position, an options menu opens where you can add and edit the content, e.g. set a title, text, image, video, pdf, ... whatever you like. You can combine internal content (e.g. images, movie clips, ...) uploaded to your Mahara repository, and external content like YouTube clips, which then will be embedded in your page. If you add a PDF box and specify a file to it, you'll see a simple PDF reader embedded in your page showing the document. Finish the dialog with the [Save] button, and it will be included in your page.

The tab [Display page] gives you a preview of your page.

At the tab [Share page] you can set who can see your page. Besides others, you can allow users to only view your page, or to copy it and work on it. So as a teacher, you can create framework pages, share them with your students who fill in the content, and then share them back to you for review.

For all sharing, you can set a start and end date to define the time when it is accessible. When you share the page with the public, it might be wise to create a SecretURL. A standard Mahara page URL is something like <http://kampschulte.org/mahara/view/view.php?id=17>, a Secret URL would be <http://kampschulte.org/mahara/view/view.php?t=KWRvOQEILYVXcldTpFAG> thus masking the page ID.

You can export your page in HTML code, so it is usable standalone without Mahara.

Collection:

A collection is a set of pages that are linked to one another and have the same access permissions. You can create as many collections as you like, but a page cannot appear in more than one collection.

HowTo: Create a Group

You have two ways to become a member of a group: Either search for groups and join them (could be free access or needed to ask permission to join from the group administrator), or found a group yourself.

Go to [Groups] → [My Groups] → [Create a new group]

The screenshot shows the Mahara user interface. At the top, the user is logged in as 'Lorenz Kampschulte' with options for 'Settings', 'Logout', and a 'Search users' field. The main navigation bar includes 'Dashboard', 'Content', 'Portfolio', and 'Groups'. Under 'Groups', there are sub-tabs: 'My groups', 'Find groups', 'My friends', 'Find friends', 'Institution membership', and 'Topics'. The 'My groups' tab is active, displaying a list of groups. The first group is 'exhibition team', which is 'Open' and has 3 members. A 'Create group' button is located in the top right corner. On the right side, the user's profile 'Lorenz Kampschulte' is shown, along with a list of 'Online users'.

In the dialog for creating a new group you can specify the member permissions, e.g. how to enter the group, who is allowed to edit the group pages, ...

The screenshot shows the 'Create group' dialog in Mahara. It includes a 'Group name' field, a 'Group description' field with a rich text editor, and a 'Path' field. The 'Settings' section is expanded, showing various configuration options. Under 'Membership', there are checkboxes for 'Open', 'Request', 'Friend invitations', and 'Recommendations'. Under 'Pages', there is a dropdown for 'Create and edit pages' set to 'All group members'. Under 'Visibility', there are checkboxes for 'Publicly viewable group' and 'Participation report'. Under 'Editability', there are date pickers for 'Start date' and 'End date'. The 'General' section is partially visible at the bottom.

Hit the [Save group] button at the lower end of the page.

Each group has its own set of pages, showing members, statistics, and giving access to group pages, collections, and a shared file repository (each group has their own quota share).

The screenshot displays the Mahara interface for a group named 'exhibition team'. At the top, the Mahara logo and user profile (Lorenz Kampschulte) are visible. The main navigation bar includes 'Dashboard', 'Content', 'Portfolio', and 'Groups'. Below this, a sub-navigation bar shows 'My groups', 'Find groups', 'My friends', 'Find friends', 'Institution membership', and 'Topics'. The 'exhibition team' group page is active, showing a welcome message and a 'Leave this group' button. The group's statistics are listed: 3 members, 2 pages, 0 files, 0 folders, 1 forum, 0 topics, and 0 posts. The 'Latest forum posts' section indicates there are no posts yet. The 'Group pages' section lists 'This is the group exhibition page...'. The 'Pages shared with this group by others' section shows two pages: 'Ferrofluid extra' by Expo Neer1 and 'Ideas for an exhibition' by John Doe. The 'Members' section displays three user avatars: Expo Neer1, Lorenz Kampschulte, and John Doe. The right sidebar shows the user profile for Lorenz Kampschulte and a list of group pages: About, Members, Forums, Pages, Collections, Share, and Files.

HowTo: Create a Collaborative Page

If you want to create a page for the group where all members can contribute to, go on the before mentioned group home page (see screenshot above) to the tab [Pages], and then hit the button [Create page].

The procedure of filling the page with content is that same as for your private pages. Different users can work on the page and edit the content at the same time (but be aware that minor inconsistencies could happen, although the modular system of these pages helps keeping them low. I couldn't really generate inconsistencies, but with my three test identities I'm not really "multiple users" ... Use your refresh button every now and then...).

Sample Users

Here's a set of sample users I created for testing purposes. You can use them during the workshop, but I'll delete them in a few days due to security reasons... But setting up your own user account is really simple (see first paragraph of the HowTo).

Sample User 1:

User: John Doe

Username (login): johndoe

Password: abcdef

Sample User 2:

User: Expo Neer1

Username: Exponeer1

Password: abcdef

* END OF DOCUMENT *