GNOME.ASIA Summit 2020

Introduction to GNU/Linux and libre software in Education

Joydeep Sen Gupta

What is the talk about?

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- GNU/Linux and libre software
  - what? how? why?

Free Software

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- licenses

Linux kernel

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- open-source (GPLv2)
- decentralized development model
- present everywhere!

Distributions

- aka *Distros*

Distributions

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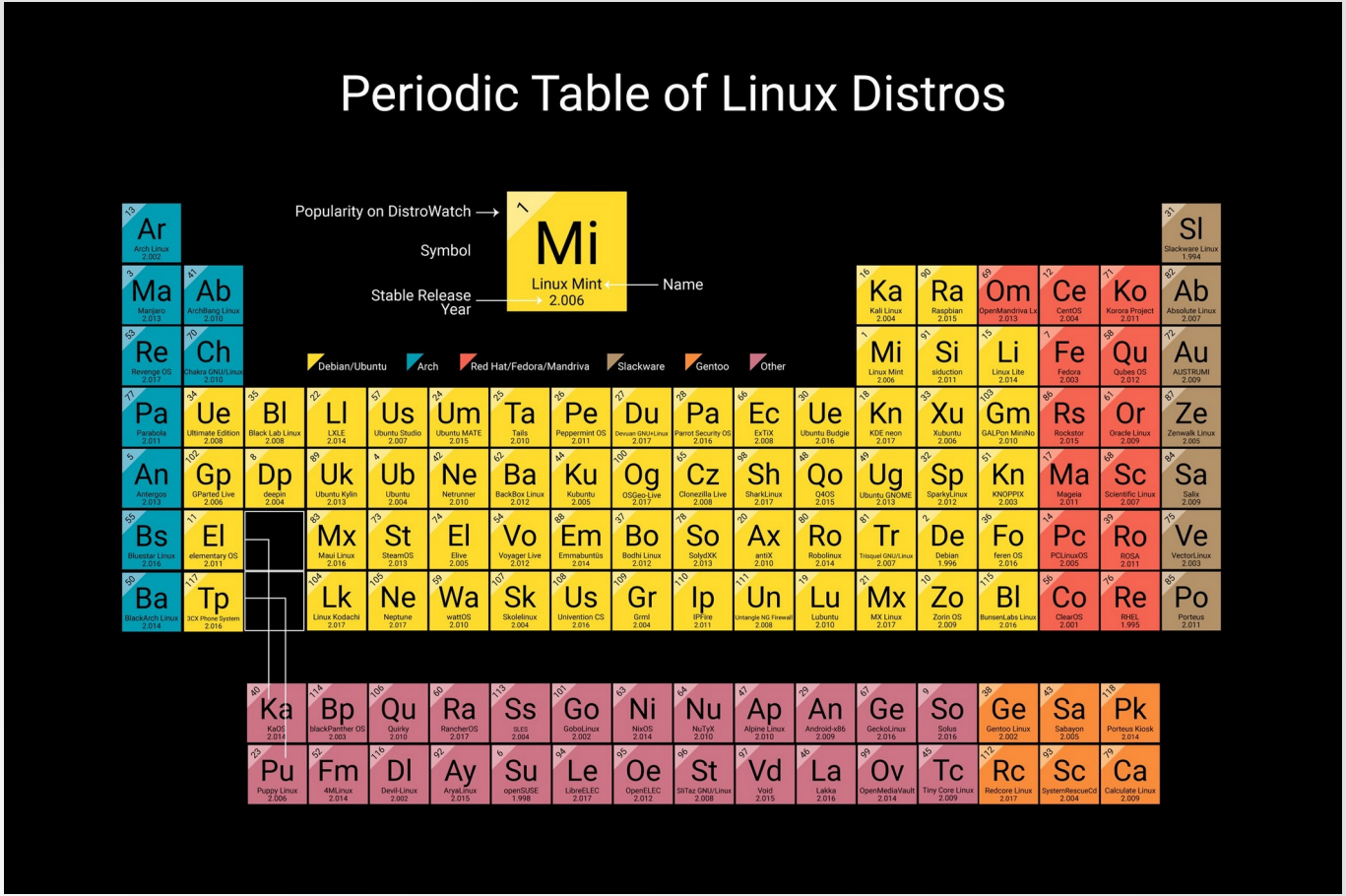
- *lots of them!*



Desktop Environments

- GNOME – *default* on many!

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- ...*lots of them*!

GNOME

- Easy to use
- Beginner friendly
- Intuitive

GNOME

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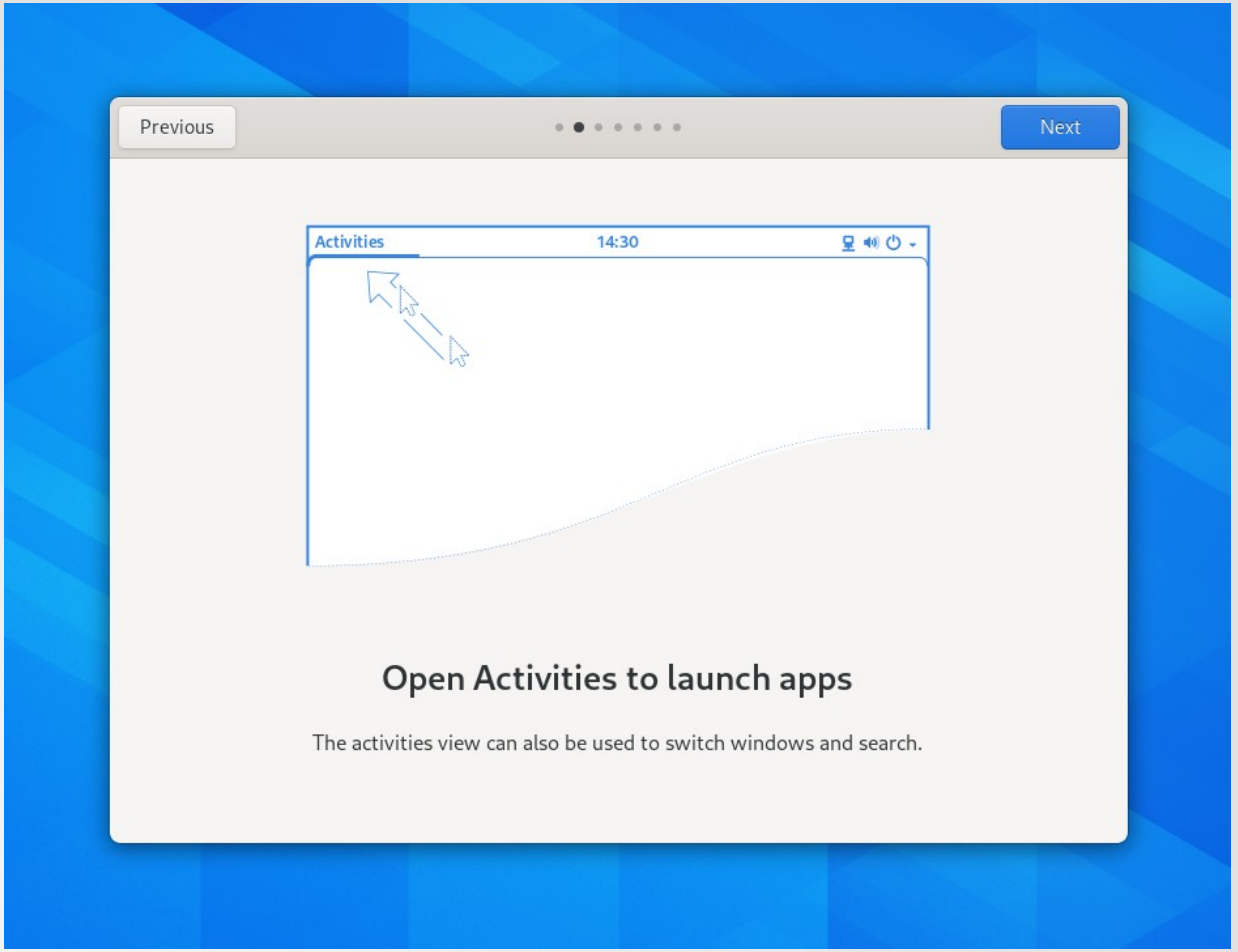
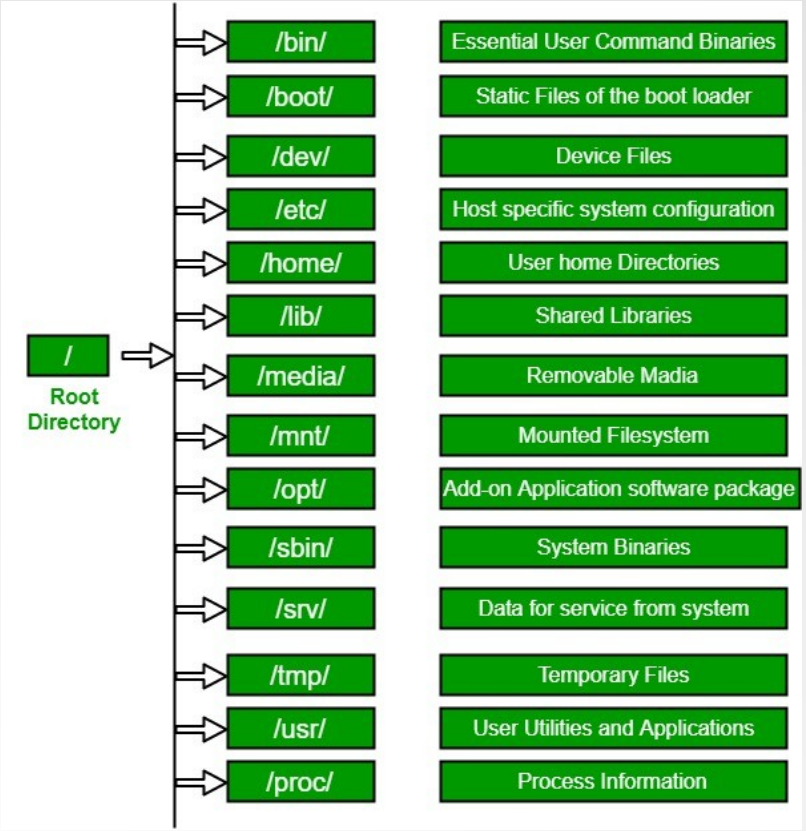
- ..now with a start up tour!

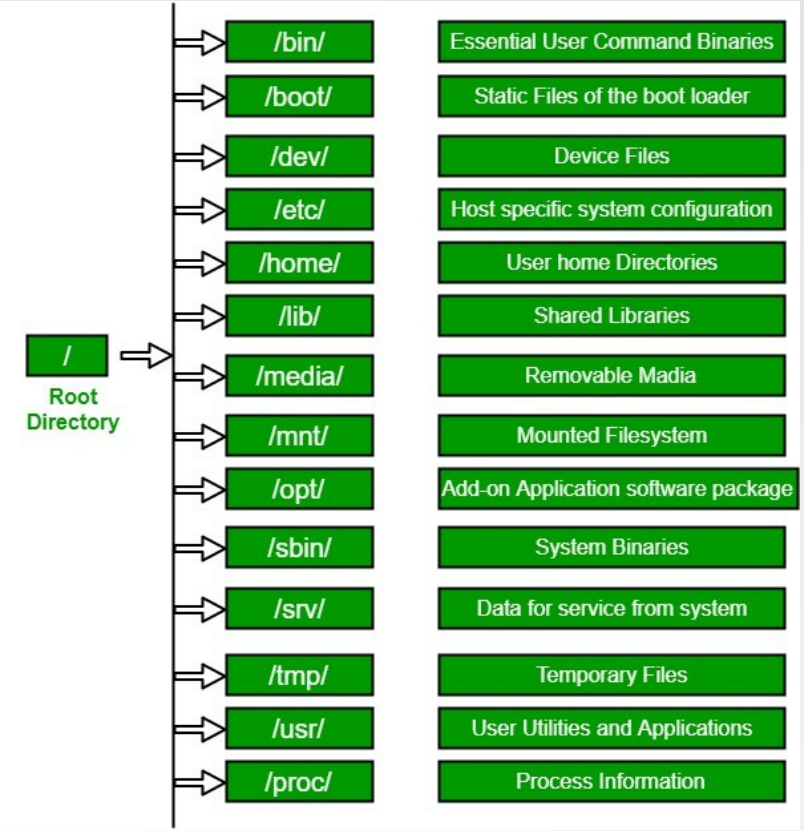


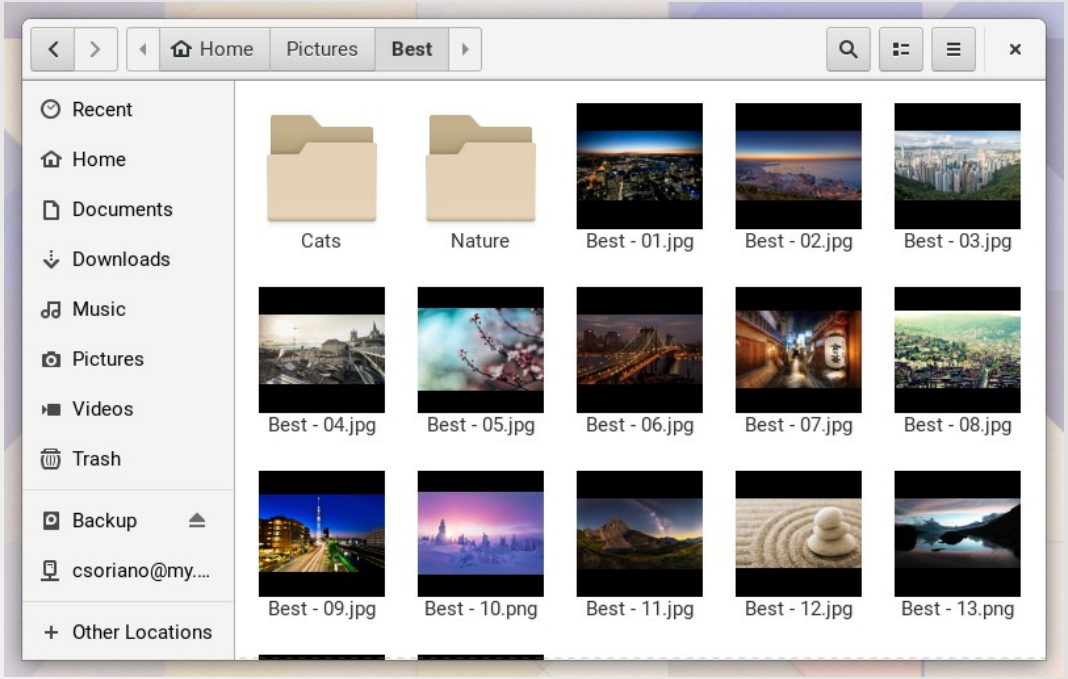
Files



- chmod - changes file modes/permissions
- chown - change file owner and group ownership
- chroot - Changes the root directory.
- cp - copy files and directories
- dd - copies and converts a file
- df - shows disk free space on filesystems
- du - shows disk usage on filesystems
- ln - creates file links
- ls - list directory contents
- mkdir - create directories
- mv - move (rename) files
- rm - remove (deletes) files
- rmdir - remove empty directories
- touch - changes file timestamps or create empty files

Files


/
Root Directory
/bin/
Essential User Command Binaries
/boot/
Static Files of the boot loader
/dev/
Device Files
/etc/
Host specific system configuration
/home/
User home Directories
/lib/
Shared Libraries
/media/
Removable Madia
/mnt/
Mounted Filesystem
/opt/
Add-on Application software package
/sbin/
System Binaries
/srv/
Data for service from system
/tmp/
Temporary Files
/usr/
User Utilities and Applications
/proc/
Process Information


Home
Pictures
Best
Recent
Home
Documents
Downloads
Music
Pictures
Videos
Trash
Backup
csoriano@my....
Other Locations
Cats
Nature
Best - 01.jpg
Best - 02.jpg
Best - 03.jpg
Best - 04.jpg
Best - 05.jpg
Best - 06.jpg
Best - 07.jpg
Best - 08.jpg
Best - 09.jpg
Best - 10.png
Best - 11.jpg
Best - 12.jpg
Best - 13.png

… but why!?

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- *“just works!”*

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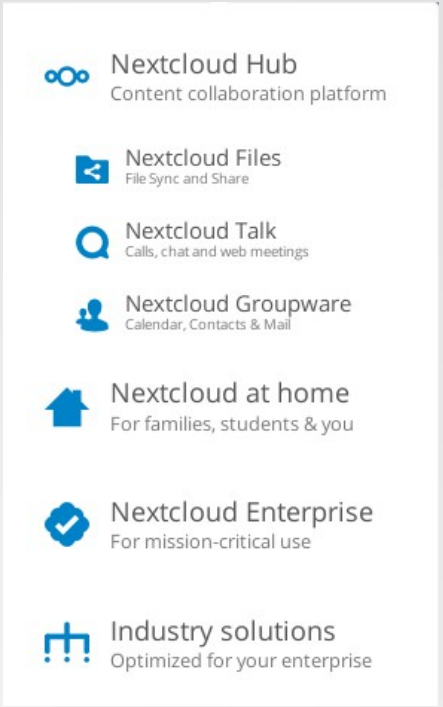
- *freedom*
- *open source*
- *open standards / file formats*
- *tools (and not ‘service’)*
- *community driven*
- *cost effective*
- *“just works!”*
- *“easier to administer!”*

Libre software

See here:
https://directory.fsf.org/wiki/Main_Page

Tools for the ‘new normal’

- **Nextcloud**
  - → cross-platform
  - → highly extensible
  - → cloud storage, file hosting and *much more!*



Nextcloud

AGPL v3
Free Software
Free as in Freedom

what you need...

- web server

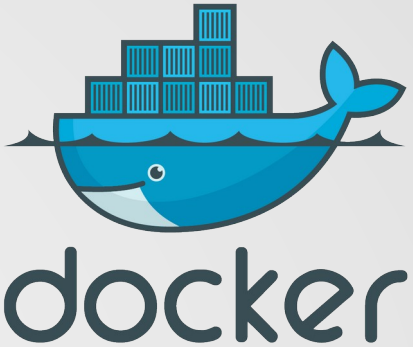
what you need...

- web server
- database

what you need...

- web server
- database
- or … docker!

$ docker run -d -p 8080:80 nextcloud

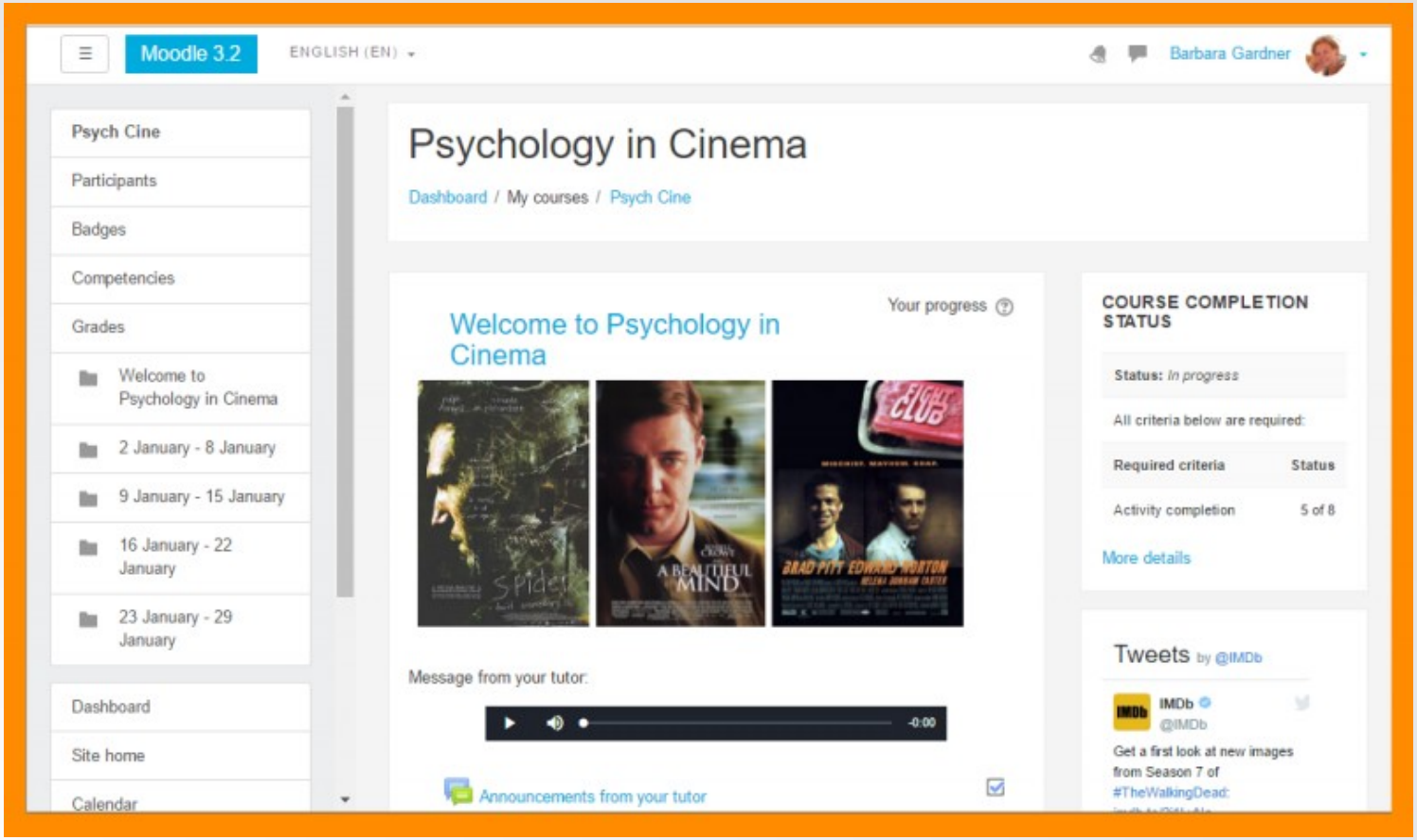


Moodle

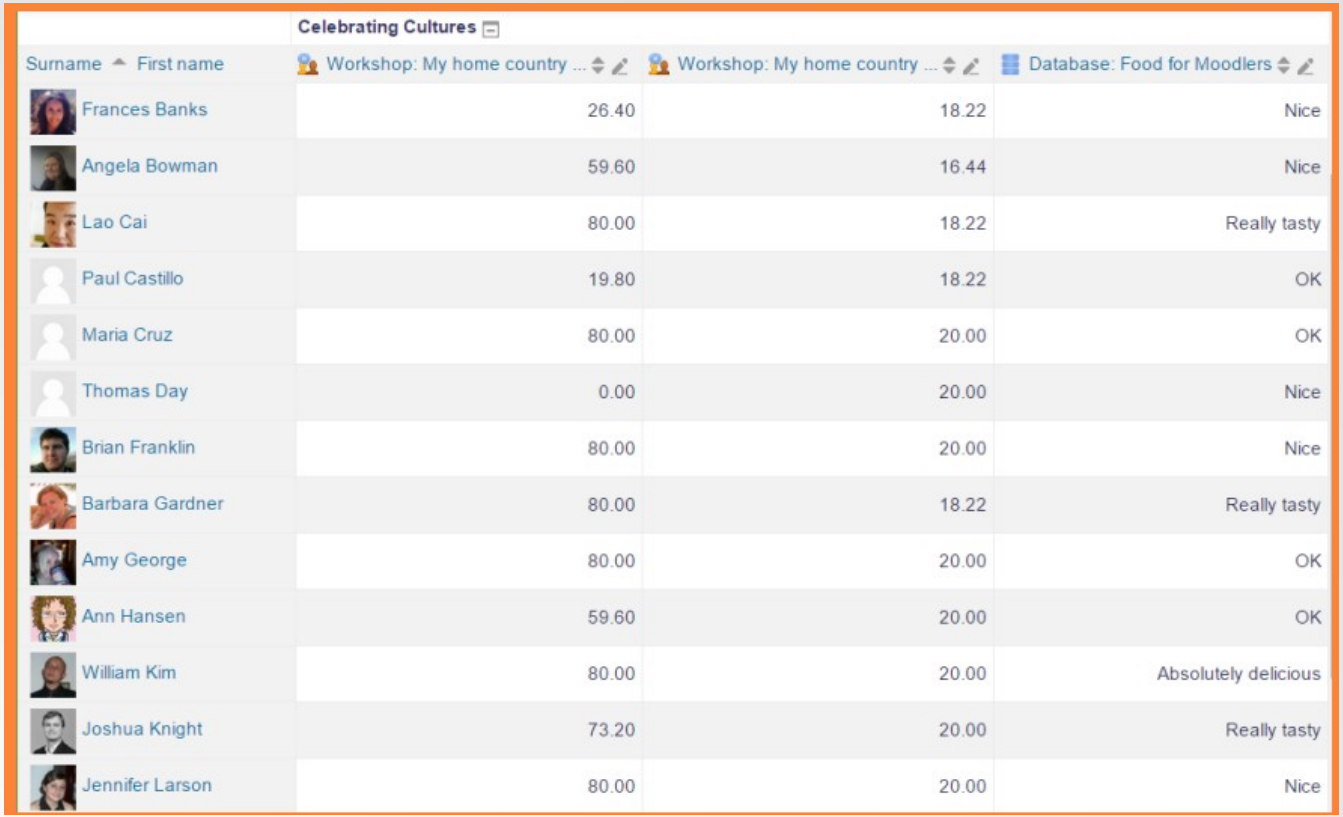
- learning management system
- cross-platform
- Students, teachers, admins

https://moodle.org/

Moodle


Moodle 3.2
ENGLISH (EN)
Barbara Gardner
Psych Cine
Participants
Badges
Competencies
Grades
Welcome to Psychology in Cinema
2 January - 8 January
9 January - 15 January
16 January - 22 January
23 January - 29 January
Dashboard
Site home
Calendar
Psychology in Cinema
Dashboard / My courses / Psych Cine
Welcome to Psychology in Cinema
Your progress
Message from your tutor:
Announcements from your tutor
COURSE COMPLETION STATUS
Status: In progress
All criteria below are required:
Required criteria
Status
Activity completion
5 of 8
More details
Tweets by @IMDb
IMDb
@IMDb
Get a first look at new images from Season 7 of #TheWalkingDead:

Moodle



	Celebrating Cultures		
Surname ▲ First name	Workshop: My home country ...	Workshop: My home country ...	Database: Food for Moodlers
Frances Banks	26.40	18.22	Nice
Angela Bowman	59.60	16.44	Nice
Lao Cai	80.00	18.22	Really tasty
Paul Castillo	19.80	18.22	OK
Maria Cruz	80.00	20.00	OK
Thomas Day	0.00	20.00	Nice
Brian Franklin	80.00	20.00	Nice
Barbara Gardner	80.00	18.22	Really tasty
Amy George	80.00	20.00	OK
Ann Hansen	59.60	20.00	OK
William Kim	80.00	20.00	Absolutely delicious
Joshua Knight	73.20	20.00	Really tasty
Jennifer Larson	80.00	20.00	Nice

GNOME.ASIA Summit 2020

Thank You!

/WHOIS **Joydeep**
~ **championquizzer** on Twitter
~ **championquizzer** on IRC (Freenode/OFTC)
/end of WHOIS