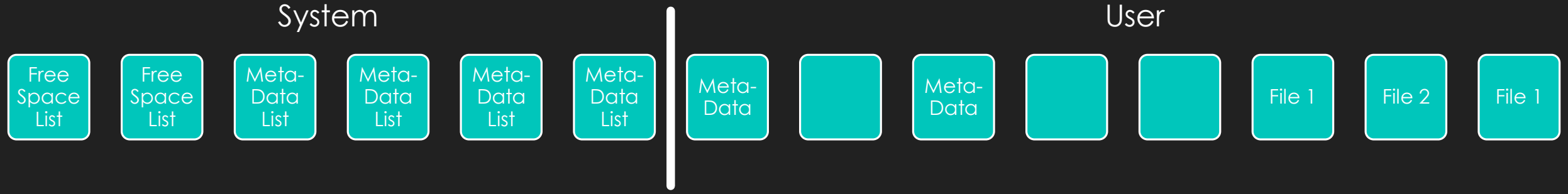
# filesystem

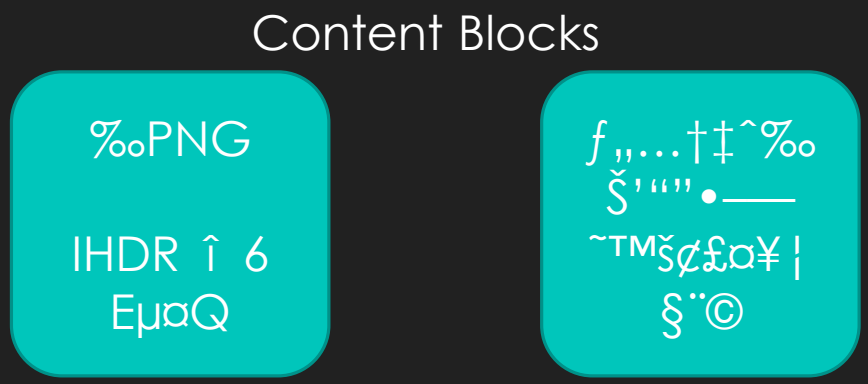
Kepplinger, Füreder, Dalpiaz, Noisternig

# General stuf



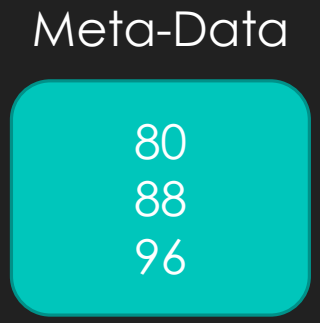
# Content Blocks

- In these are the partial data of the files



# Meta-Data

- The meta-data blocks contain the addresses for the associated content blocks
- If block has to less space, on the end of the block a int is reserved for next block



# Meta-Data List

- In the metadata list, all addresses of the metadata are saved and sorted by filename
- Meta Data list cant have enough space because size is fixed. 5 Gig per 1000 Gigs of space.

Meta-Data List

Meta-Data foo.txt…40
Meta-Data Max.cs…48
Meta-Data voo.txt…56

# Free Space List

- A list in which all addresses of the free blocks are stored
- If a block will be used it is going to be discharged
- If a block is released, it will be added again to the list
- The Free Space List has a constant memory space

# saving

- Take memory address from free space list
- Write the memory address to a new meta-data block.
- The address of the meta-data block is stored in the pre-reserved meta-data list block
- The content is saved

# Increase

- The address of the new content block is stored in the meta-data block
- If the last block is not full, its going to be used further

# Iterate

- Iterate through Meta-Data block

# Seek

- Content block is calculated
- Entries in the Meta-Data block are skipped to the file, because we know the calculated place

# remove

- The storage space of the meta-data file and its content is put back on the list with free space
- The meta-data file is removed from the meta-data list

# decrease

- Addresses of the content come on the Free Space List
- Entries are removed from the metadata