Keyboards, R.I.P.

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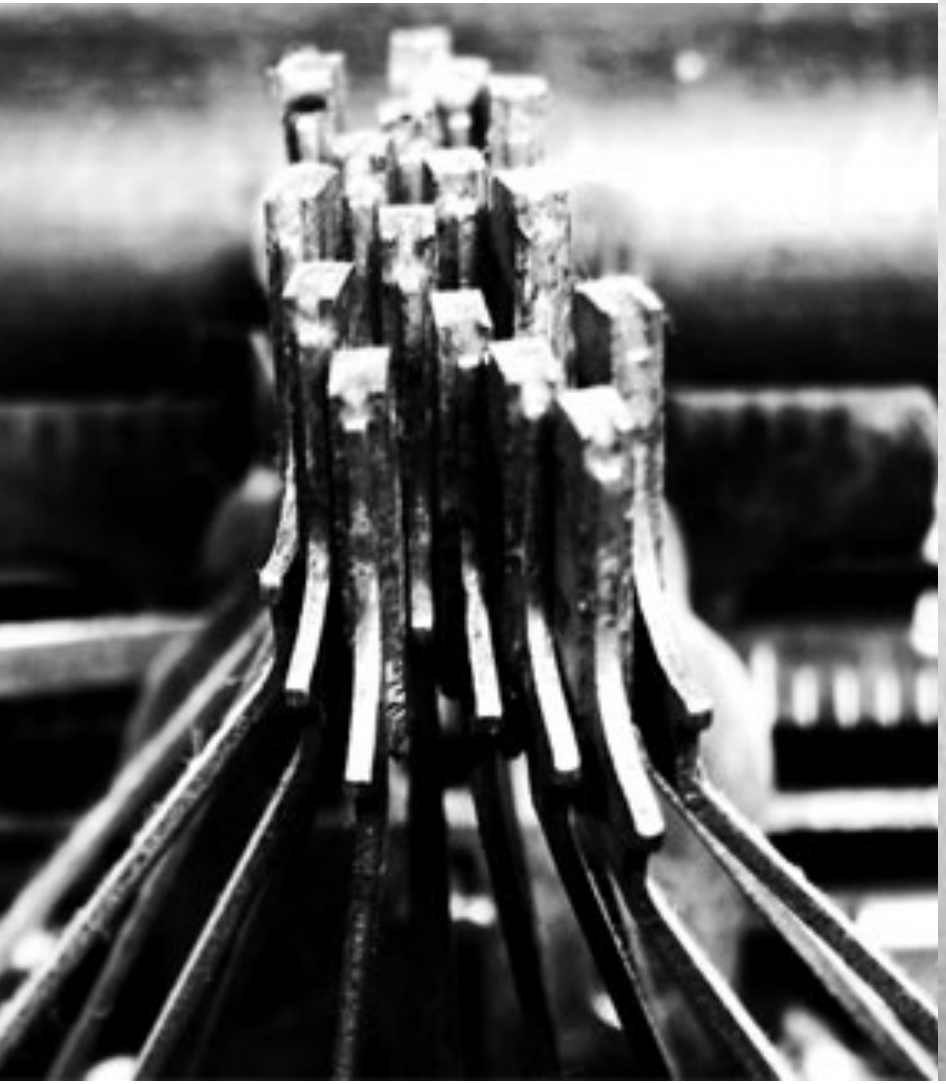
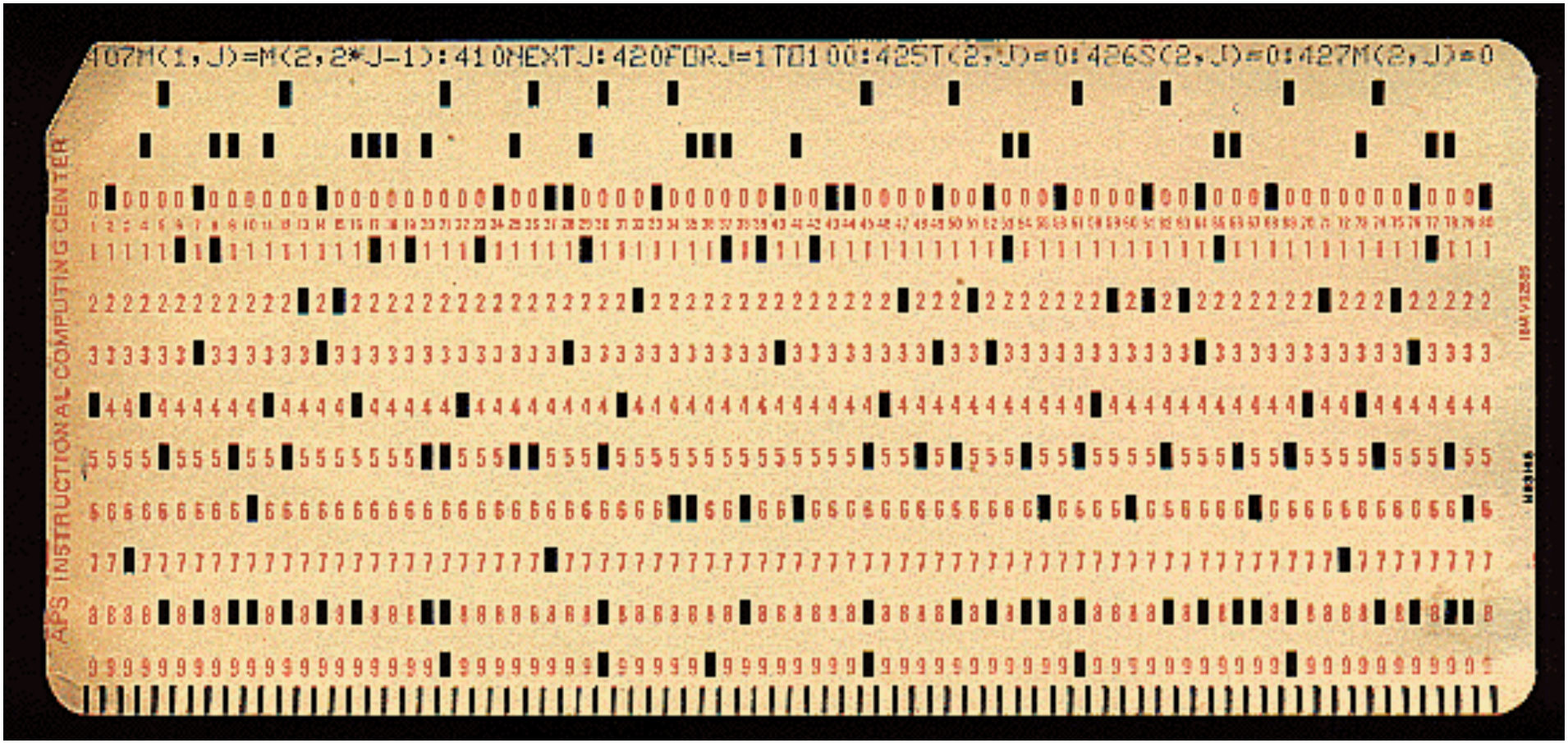
We mourn the impending loss of the beloved *keyboard,* who has been with us for many a decade of computing.

Ancestor: QWERTY

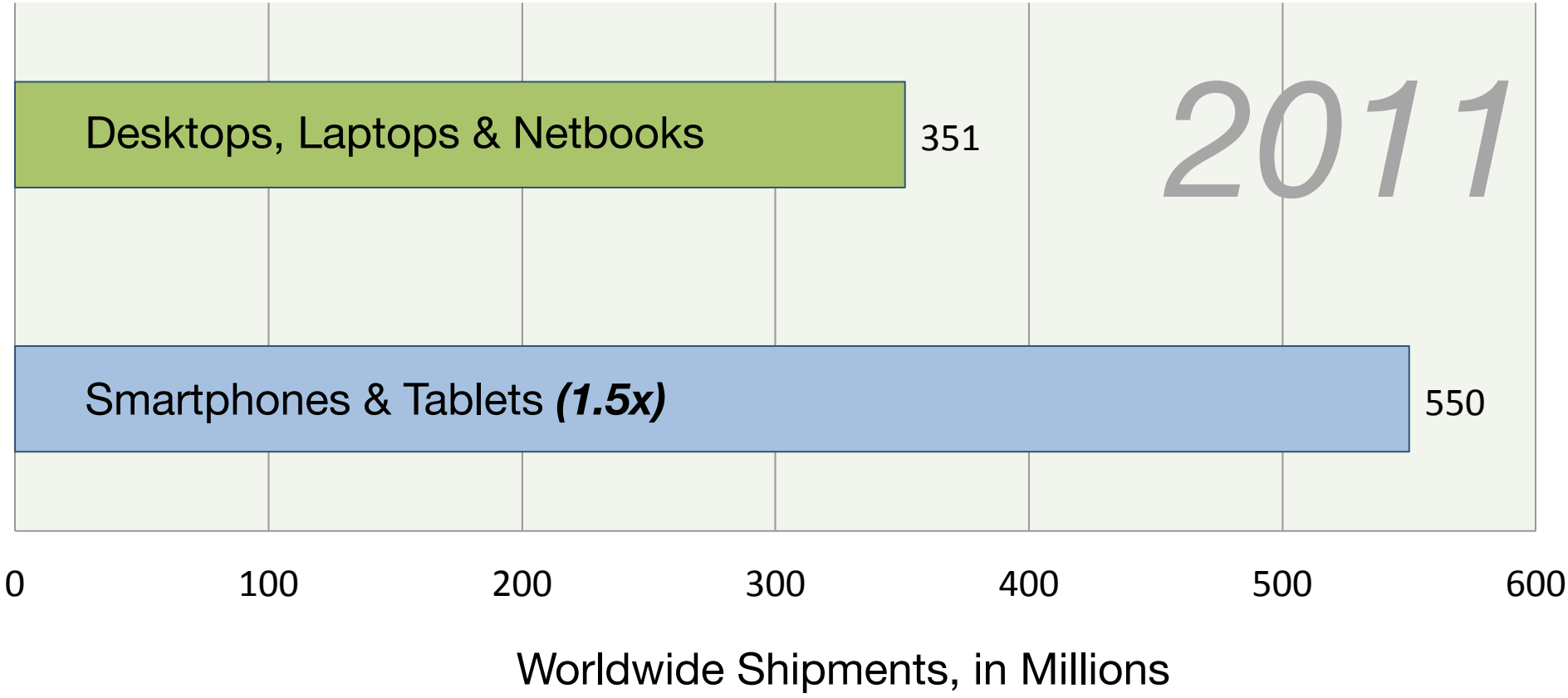


Ancestor: Punch Cards

80 chars



Computing and Keyboards



Canalys. Worldwide Smartphone and Client PC Shipment Estimates. 2012.

There will soon be more computers *without* keyboards than with.

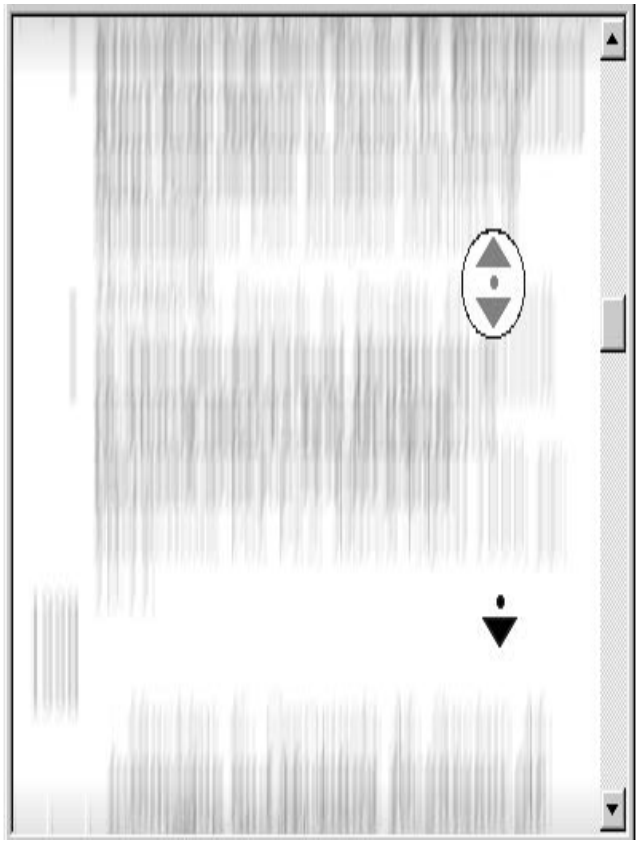
SELECT *
FROM SQL;
⏎

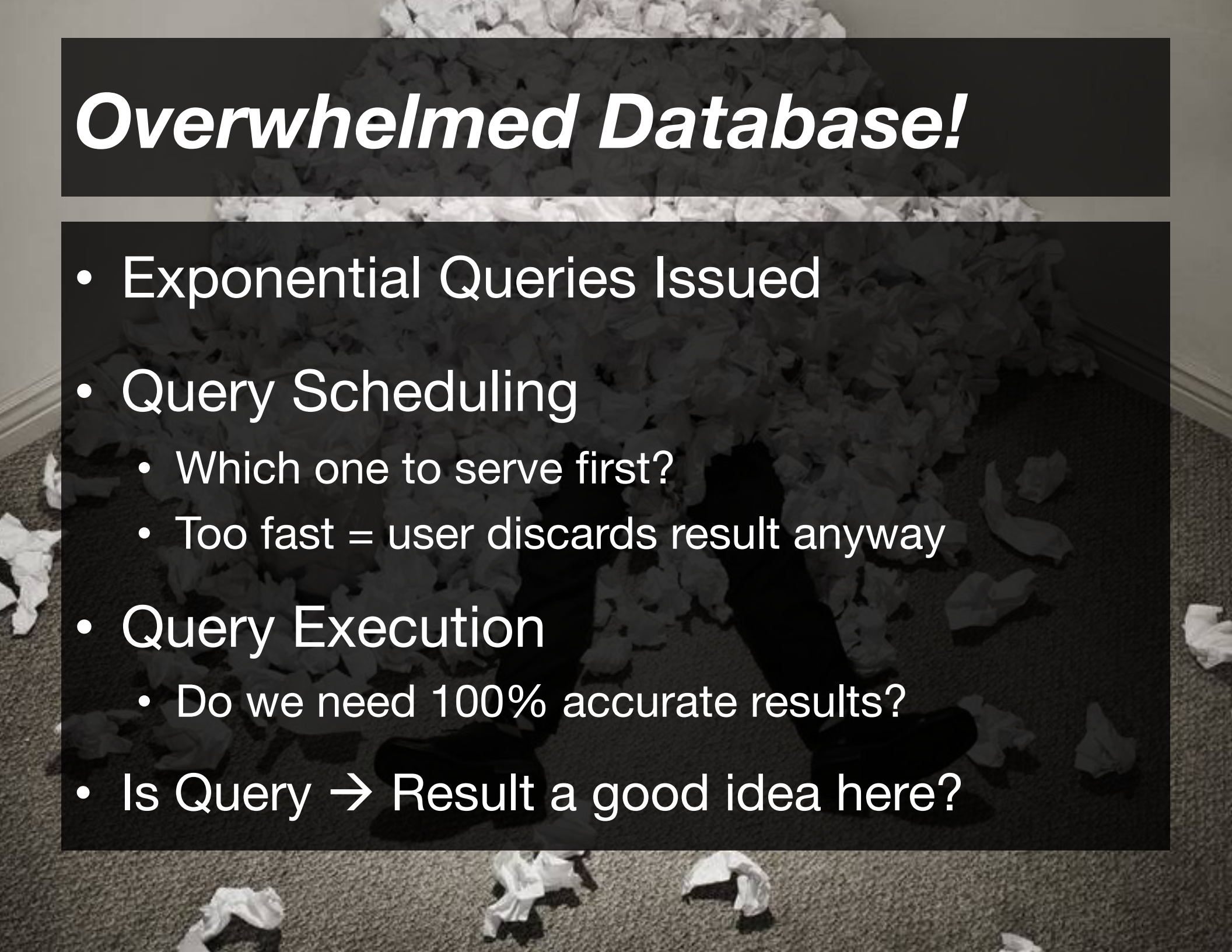
New Workloads: Inertial Scroll

Results: Page **3** of **9**

Date	Price ▲	Bed.	Bath.
14 Jan	455K	2	2
13 Jun	477K	4	3
8 Dec	480K	4	4
6 Feb	505K	5	3
19 May	555K	5	4
12 Jan	578K	3	3
16 May	593K	4	5
5 Jun	650K	5	3

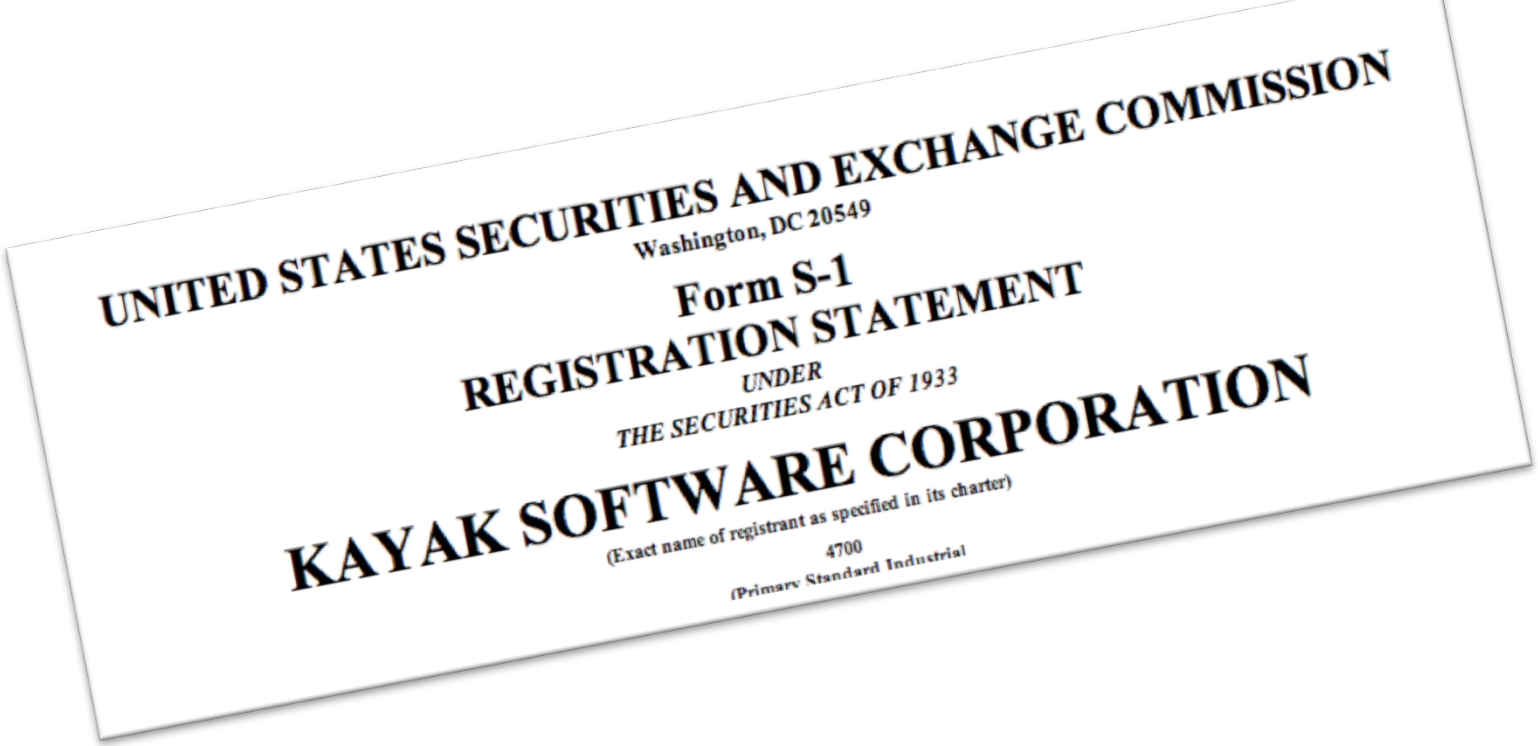
Sorted Column





Overwhelmed Database!

- Exponential Queries Issued
- Query Scheduling
  - Which one to serve first?
  - Too fast = user discards result anyway
- Query Execution
  - Do we need 100% accurate results?
- Is Query → Result a good idea here?


UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549
Form S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933
KAYAK SOFTWARE CORPORATION
(Exact name of registrant as specified in its charter)
4700
(Primary Standard Industrial

Kayak.com IPO filing:
Kayak mobile usage –
39% in 2010 to 55% in 2011

New Modes of Interaction

- Mouse (2+ decades)
- Pen (1 decade)
- Multitouch
- Imaging / Motion sensing (Kinect)
- *Many more*

ges•ture | ˈjesCHər |

noun

a movement of part of the body, esp. a hand or the head, to express an idea or meaning: *Alex made a gesture of apology* | *so much is conveyed by gesture*.

Gestural Databases

(a new class of database systems)

We need to fundamentally rethink databases to support gestural workloads

What does a Gestural Database System look like?

gestureDB.org