TECHNICAL COMPONENTS

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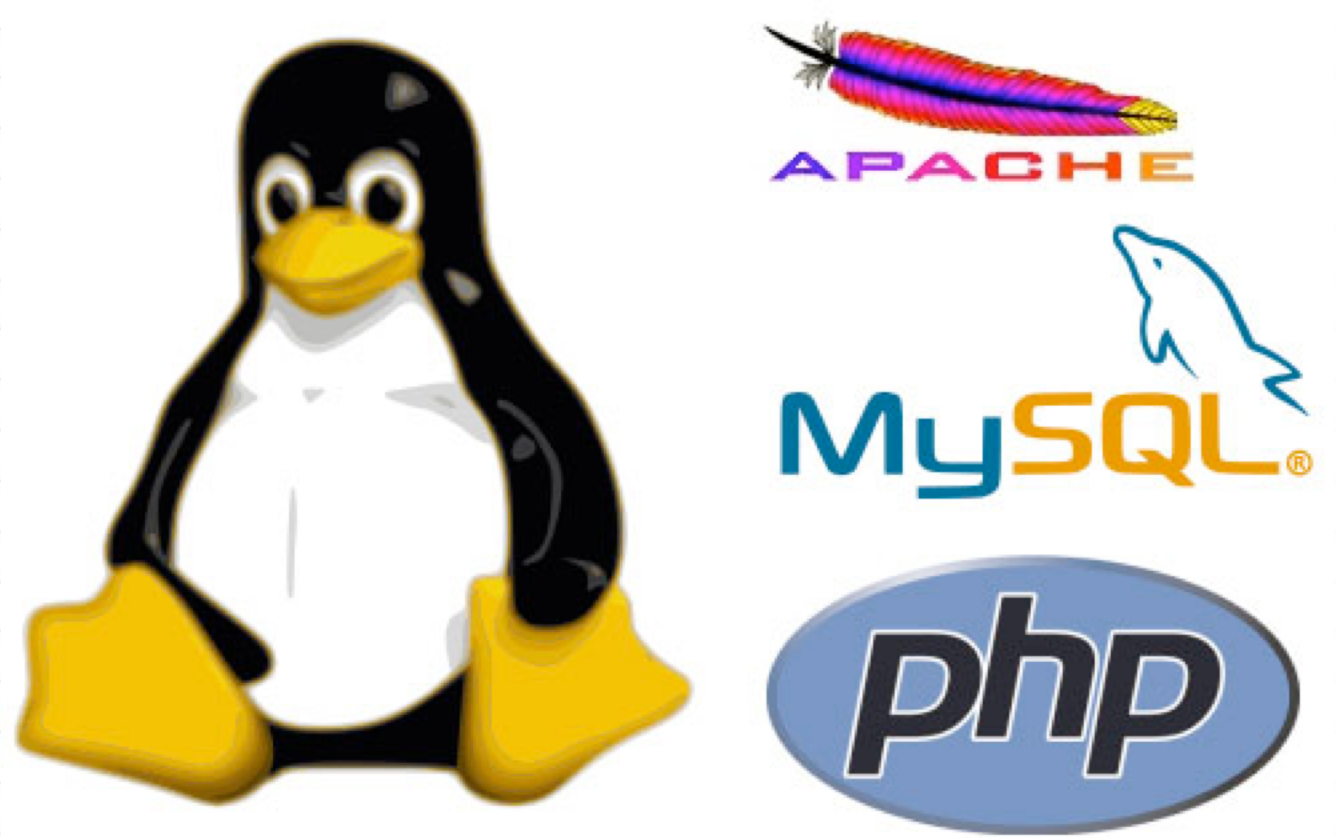
POLYTECH NICE-SOPHIA

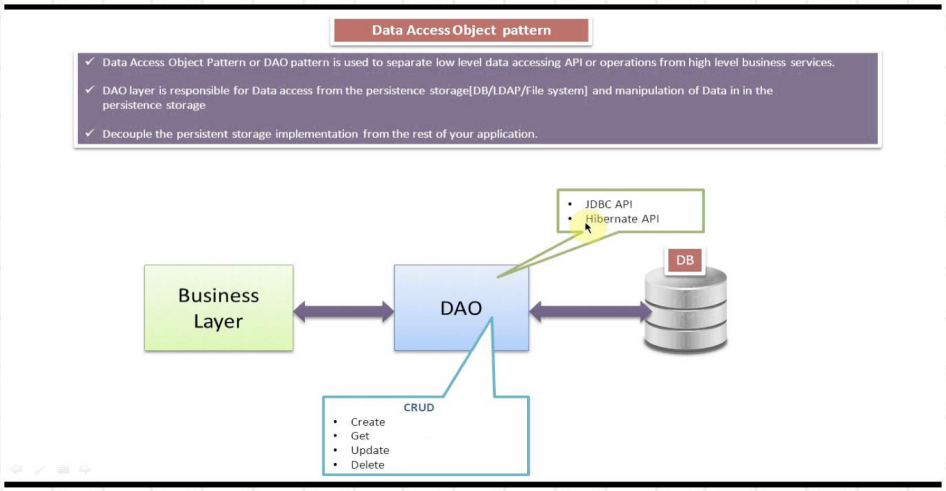
DATA STORAGE

Typical student app



Databases

- Do you need one?
- Who accesses it?
  - Your users – and the DB is handling concurrency
  - Your app – and the DB is its own tier, slave of a real model
- SQL vs. non-SQL
- O/R mapping, DAO

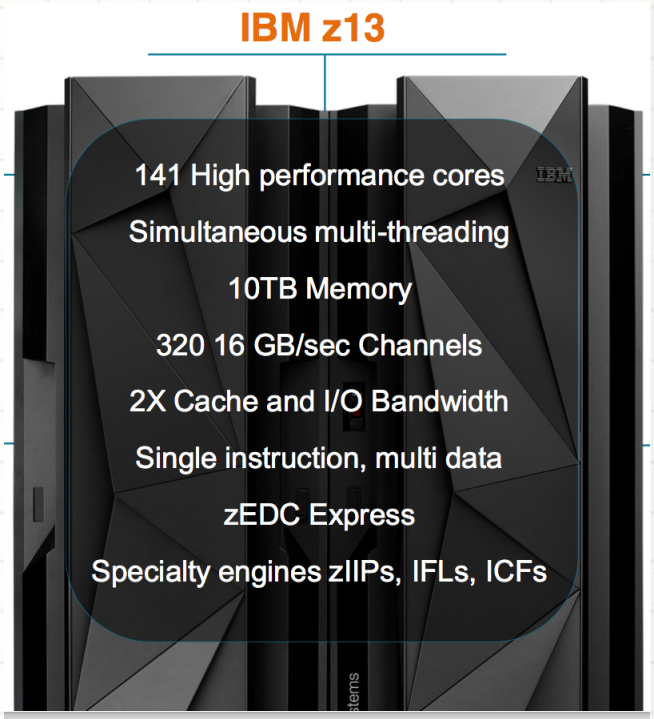


Database and big data

- DB handles large volume well
- Details in January

Other places to store data

- Files
- XML streams (XPath, XQuery, XML DBs)
- Distributed
  - Eg: in client!
  - Even in your device
- In memory!



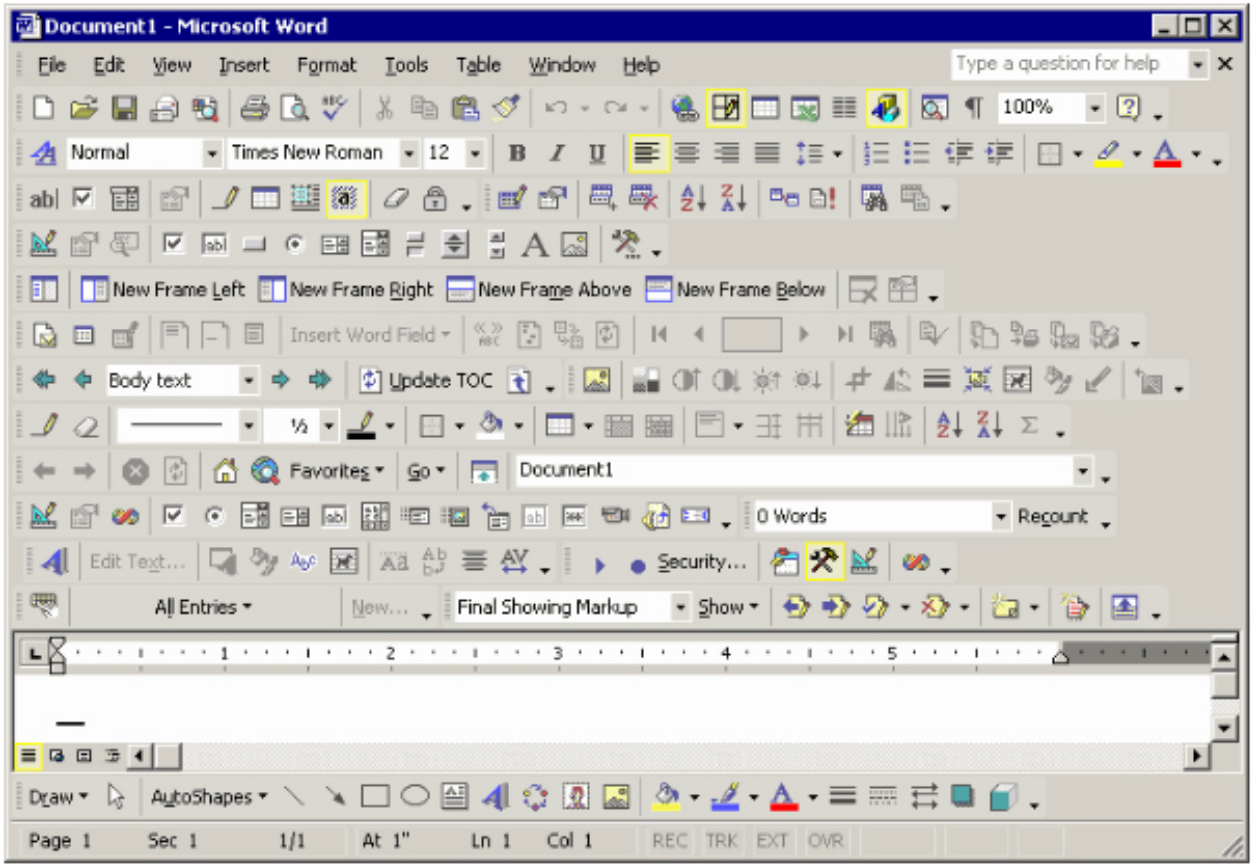
UI

Why UI?

- Why tackle UI in an architecture class?
- Is it really important?

Choose the right UI type

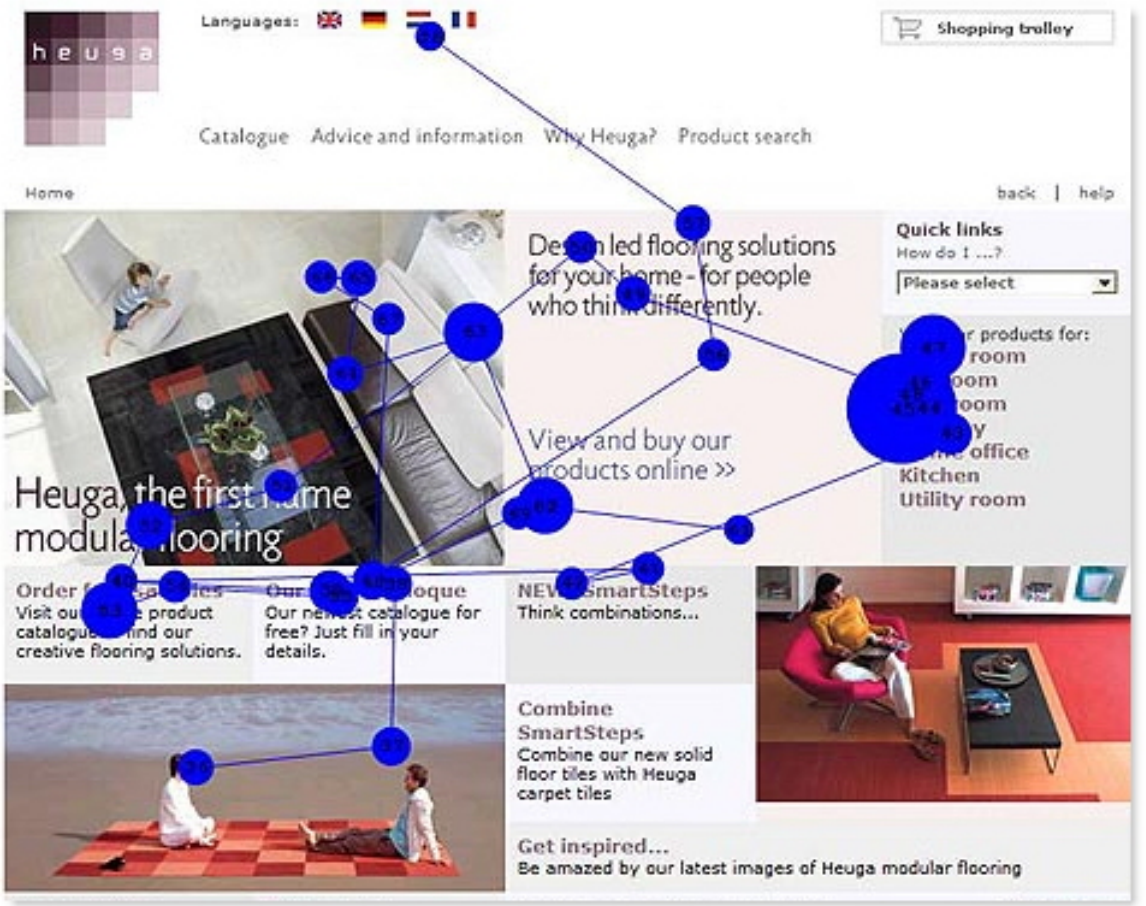
- Fat client



Choose the right UI type

- Thin client
- Mobile
- Device

Eye tracking



Remote Invocation

How to invoke code running somewhere else?

- “somewhere else” =
  - Distant
  - Local, but in another process
- RPC
- Events
- Messages
- Web Services
- REST API

Things to consider

- Synchronous / async
  - What does the caller do in the meantime?
  - How does it know the call failed?
- Message size
- Marshalling / unmarshalling → coupling

- Batch processing

QUESTIONS?