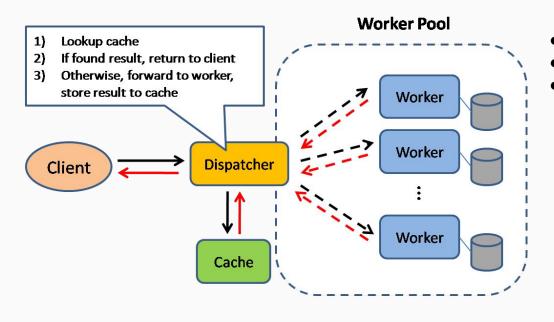
Caching in large scale distributed systems

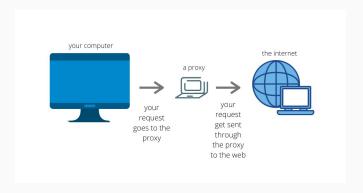


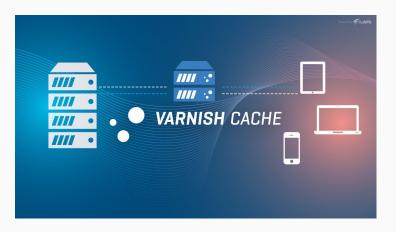
- Improves page load
- Reduce load on db servers
- Cache in front of database



- Serve content from locations closer to the user
- Request fulfilled by CDN does not go to servers
- Push/Pull CDNs

Caching types: CDN

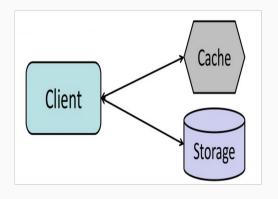




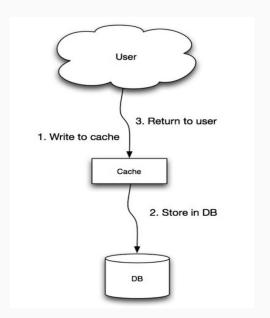
- Proxy server with static content.
 Return response for cached requests
- Varnish for servers with http protocols
- Default caching for database server

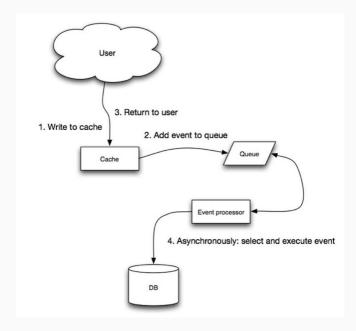
Caching types: Web server / database caching

- In-memory caches Key-value stores
- Data stored in RAM
- Row level
- Query-level
- Fully-formed serializable objects
- Fully-rendered HTML



- Cache side
- Write through
- Write behind





Thanks!

Resources:

 https://github.com/donne martin/system-design-prim er#cache

