Daily Homework

03/17/2022

Notes and Q&A:

<https://docs.google.com/document/d/1O7ogrWUuttxBATKADPk98zPqyQcgCWbdF18YKx0xcSQ/edit?usp=sharing>

Checklist:

<https://docs.google.com/document/d/1fmYhFHUIy44UIId1fpUUV-vWt9RdjD0ghkv9n5PqzBw/edit?usp=sharing>

1. What have you reviewed today?

Multi-Threading in Java

## thread vs process

* process
* independent memory space, heap, OS resources
* thread
  + shared memory space
  + private stack, program counter, register

## Thread states

* new
* runnable
* blocked
* waiting
* timed\_waiting
* terminated

## thread creation

* extends Thread
* implements Runnable
* implements Callable
* thread pool

## Difference between cached thread pool and fixed thread pool

**Cached thread pool**

* Suitable when we have lots of predictable tasks
* Synchronized Queue
* Threads have not been used or cached for sixty seconds will be terminated and remove from cached
* Thread pool can grow from one to INTEGER.MAX\_VALUE

**Fixed thread pool**

* Suitable when we’d like to limit the concurrent works
* Blocking Queue
* Keep all threads running until it is terminated
* Thread pool size is fixed

1. What new things you have learned today?

OSI model:

open system interconnection model

* Physical Layer
* Data Link Layer
* Network Layer
* Transport Layer
* Session Layer
* Presentation Layer
* Application Layer

TCP/IP model

* Network Access Layer
* Internet Layer
* Transport Layer
* Application Layer

# **HTTP**

Hypertext Transfer Protocol

## HTTP Requests

* HTTP Version type
* a URL
* HTTP method
* HTTP request headers
* HTTP body (optional)

## HTTP Status Code

* 1xx information (100 - 199)
* 2xx success (200 - 299)
* 3xx redirection (300 - 399)
* 4xx client error (400 - 499)
* 5xx server error (500 - 599)

1. What is your learning plan tomorrow?
2. Review JBDM and Hibernate in Java
3. Learn new class materials after class
4. Maybe a coding question on Stack