COMP30220: Distributed Systems

Dr. Rem Collier

Group Project: A Fault Tolerant Voting Service

Due on We're not even sure

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Contents

Project Description

This will pretty much be a re-itteration of the proposal, but we're no longer using uddi

Technologies Used

so info on the technologies and how we used them/what we used them for

Jax-WS

To publish server end points

Java RMI

to maintain a list of active servers

SQL - @ed "is it sql or mysql?"

each server has it's own sql db, used to keep track of votes.

The Raft Alogorithm

Basic Principle

what is does
and
steps,

1. start as follower
2. elect leader
3. heartbeat
4. if no heart beat, elect new leader

Electing a leader

me me me me

Heart Beats

badump

Our Implementation

Consists of the following 3 parts

Clients

look to rmi for current leader
do votes
request winner from leader

Servers

a server has 3 parts

The Raft Element

The Coordinator

The Database

jgUDDI

because jUDDI was too hard

Conclusion

it was fab