Research and Analysis (Remote Method Invocation: Mechanisms)

*Navjot Singh, Email: Virksaabnavjot@gmail.com, National College of Ireland, Mayor Street, Dublin 1, Ireland*

**Introduction**

A Distributed system (DS) is a model/collection of independent computers linked together through a network which produce an integrated computing facility using software programs (middleware). Some widely used DS are Word Wide Web (WWW), Email, Cloud services like Google drive and Dropbox, teleconferencing services like Skype. In Distributed communication services provided by a server can be accessed by multiple clients. The goals in mind while implementing distributed systems are – scalability, reliability, openness, transparency and performance. Inter-process communication is at the core of DS, and there are different ways to achieve that for example - Message Oriented or Stream Oriented communication but for the purpose of this research report will will focus primarily on Remote Method Invocation(RMI) which is a Java implementation of Remote Procedure Calls (RPC) that allows server and client software to communicate with each other.

**Discussion**

**Implementation**

**References**

Villanova University, United States, *what is Distributed Systems? Accessed 3rd April 2017*

<http://www.csc.villanova.edu/~schragge/CSC8530/Intro.html>

Distributed Systems Goals Slides, pp.2-3

<https://www.cis.upenn.edu/~lee/07cis505/Lec/lec-ch1-DistSys-v4.pdf>

Tanenbaum, A. and Steen, M. (2007). *Distributed systems - Principles and Paradigms*. 2nd ed. pp.115-116. <https://vowi.fsinf.at/images/b/bc/TU_Wien-Verteilte_Systeme_VO_(G%C3%B6schka)_-_Tannenbaum-distributed_systems_principles_and_paradigms_2nd_edition.pdf>

What is RMI Basic’s?

<http://www.javatpoint.com/RMI>, <https://www.youtube.com/watch?v=YyCUmKojtgk>

RMI. How RMI works?

<http://infolab.stanford.edu/CHAIMS/Doc/Details/Protocols/rmi/rmi_description.html>

RMI PATRIK FUHRER <http://diuf.unifr.ch/drupal/sites/diuf.unifr.ch.drupal.softeng/files/file/publications/others/RMI.pdf>

RMI: Observing the Distributed Pattern

<http://www.cs.indiana.edu/~dgerman/tutorials/fie2004.pdf>