

distributed Systems – Lab 2 Report

Distributed Systems – Lab 2 Remote Method Invocation Report



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**Task #1:**

Define the interface to the Election service in Java EMI.

1. The Election Interface can be found in the attached folder **DistributedSystems - Lab 2 - Task 1 Define Election Interface** under **src**. (~/DistributedSystems - Lab 2 - Task 1 Define Election Interface\src\ElectionInterface.java). The Election Interface contains function definitions for *vote* and *result* functions. The vote function takes in a string (candidate’s name) and int (voter number), also returns a Boolean to identify if the vote was casted successfully or not. The result() function takes in no parameters but returns a vector of objects (ElectionResults objects). I have an ElectionResults class that is used to store the election results as a serialized object in a vector. The ElectionResults.java file can be found in folder **DistributedSystems - Lab 2 - Task 1 Define Election Interface** under **src** (~/DistributedSystems - Lab 2 - Task 1 Define Election Interface\src\ElectionResults.java) More details regarding the files and functions can be found in the source files ElectionInterface.java and ElectionResults.java.

**Task #2:**

Implement the Election service in Java RMI. Your implementation should ensure that a vote is recorded whenever a client thinks they have sent in a vote.

Write a client program and run multiple instances of the client to case votes. A client may also query the server for the results and display them.