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MUDServiceImplementation.java
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CS2524: DISTRIBUTED SYSTEMS AND SECURITY
ASSESSMENT MUD GAME
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package cs3524.solutions.mud;
import java.rmi.*;
import java.util.*;
import cs3524.solutions.mud.MUD;
import cs3524.solutions.mud.MUDinterface;
public class MUDServiceImplementation implements MUDinterface
        private MUD mudInstance;
   public Map<String, MUD> MUDs = new HashMap<String, MUD>();
   //limits the number of muds that can be created
   public Integer mudlimit = 4;
   public Integer mudcount = 0;
   public MUDServiceImplementation() throws RemoteException
       public void makeMUD(String mudName) throws RemoteException
               try
                        //try and make a mud instance
           if(mudcount == mudlimit)
               System.out.println("max number of MUDS have been created.");
           else
               MUDs.put(mudName, new MUD("mymud.edg", "mymud.msg", "mymud.thg"));
               System.out.println("MUD " + mudName + " created");
               mudcount = mudcount + 1;
        catch (Exception ex)
                       System.err.println("error creating mud: " + ex.getMessage());
    public String welcome() throws RemoteException
       String output = "";
       output = ("\n Available MUDS are listed below: \n");
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for(Map.Entry<String, MUD> entry : MUDs.entrySet())

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String key = entry.getKey();
       output += (key + "\n");
    output += ("\n");
    output += ("please select a MUD to connect to > ");
    return output;
public String pickMUD(String inputMud) throws RemoteException
    String output = "";
    if (MUDs.containsKey(inputMud))
       mudInstance = MUDs.get(inputMud);
       output = ( "welcome to mud server:" + inputMud + "\n" );
        output += ( "please enter a username > " );
         else {
        output = "False";
    return output;
public String myStartLocation() throws RemoteException
    return mudInstance.startLocation();
public void addThing( String loc, String thing ) {
        mudInstance.addThing(loc, thing);
public String moveThing( String loc, String dir, String thing ) {
        return mudInstance.moveThing(loc, dir, thing);
public String locationInfo( String loc ) {
        return mudInstance.locationInfo(loc);
public boolean take (String item, String location) {
        return mudInstance.take(item, location);
public String ItemsAtLocation( String loc ){
        return mudInstance.ItemsAtLocation(loc);
public void addUser(String auser) {
    mudInstance.addUser(auser);
public void removeUser(String auser) {
    mudInstance.removeUser(auser);
public String whoIsonline(){
    return mudInstance.whoIsonline();
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public void delThing( String loc, String thing ) {
    mudInstance.delThing(loc, thing);
}
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