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// joi/7/juno/Directory.java
//
//
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import java.util.*;

/**
 * Directory of JFiles.
 *
 * A Directory is a JFile that maintains a
 * table of the JFiles it contains.
 *
 * @version 7
 */

public class Directory extends JFile
{
    private TreeMap jfiles;  // table for JFiles in this Directory

    /**
     * Construct a Directory.
     *
     * @param name the name for this Directory (in its parent Directory)
     * @param creator the owner of this new Directory
     * @param parent the Directory in which this Directory lives.
     */

    public Directory( String name, User creator, Directory parent)
    {
        super( name, creator, parent );
        jfiles = new TreeMap();
    }

    /**
     * The size of a Directory is the number of JFiles it contains.
     *
     * @return the Directory's size.
     */

    public int getSize()
    {
        return jfiles.size();
    }

    /**
     * Suffix used for printing Directory names;
     * we define it as the (system dependent)
     * name separator used in path names.
     *
     * @return the suffix for Directory names.
     */

    public String getSuffix()
    {
        return  JFile.separator;
```



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    }

    /**
     * Add a JFile to this Directory. Overwrite if a JFile
     * of that name already exists.
     *
     * @param name the name under which this JFile is added.
     * @param afile the JFile to add.
     */

    public void addJFile(String name, JFile afile)
    {
        jfiles.put( name, afile );
        setModDate();
    }

    /**
     * Get a JFile in this Directory, by name .
     *
     * @param filename the name of the JFile to find.
     * @return the JFile found.
     */

    public JFile retrieveJFile( String filename )
    {
        JFile aFile = (JFile)jfiles.get( filename );
        return aFile;
    }

    /**
     * Remove a JFile in this Directory, by name .
     *
     * @param filename the name of the JFile to remove
     */

    public void removeJFile( String filename )
    {
        jfiles.remove( filename );
    }

    /**
     * Get the contents of this Directory as an array of
     * the file names, each of which is a String.
     *
     * @return the array of names.
     */

    public String[] getFileNames()
    {
        return (String[])jfiles.keySet().toArray( new String[0] );
    }
}
```