

```
import java.util.List;
```

```
public interface FileSystemKernel extends Standard {
```

```
    /**
     * Creates a new file with the given name and type.
     *
     * @param name The name of the file to be created.
     * @param type The type of the file (e.g., TEXT, IMAGE, etc.).
     * @ensures A new file with the specified name and type is created.
     */
    void createFile(String name, FileType type);

    /**
     * Deletes the file with the given name.
     *
     * @param name The name of the file to be deleted.
     * @ensures If a file with the specified name exists, it is deleted.
     */
    void deleteFile(String name);

    /**
     * Retrieves the file with the given name.
     *
     * @param name The name of the file to retrieve.
     * @return The file with the specified name, or null if not found.
     * @ensures If a file with the specified name exists, it is returned.
     */
    File getFile(String name);

    /**
     * Creates a new directory with the given name.
     *
     * @param name The name of the directory to be created.
     * @ensures A new directory with the specified name is created.
     */
    void createDirectory(String name);

    /**
     * Deletes the directory with the given name.
     *
     * @param name The name of the directory to be deleted.
     * @ensures If a directory with the specified name exists, it is deleted.
     */
    void deleteDirectory(String name);

    /**
     * Retrieves a list of all files in the file system.
     *
     */
```

```
* @return A list containing all files in the file system.
* @ensures A list of all files in the file system is returned.
*/
List<File> listFiles();

/**
 * Renames the file with the specified old name to the new name.
 *
 * @param oldName The current name of the file.
 * @param newName The new name for the file.
 * @ensures If a file with the specified old name exists, its name is
 * changed to the new name.
 */
void renameFile(String oldName, String newName);
```

```
}
```