Hello,

As we discussed in the previous session"Customised Virtual File System".

Please prepare documentation for the Customised Virtual File System project.

Project documentation should contain below things

1. Name of the project
2. Technology used
3. User interface used
4. Platform required
5. Hardware requirements
6. Description of the projecta
7. Data structures used in the project
8. Diagram of data structures used in the project
9. The flow of the project
10. Actual code of the project
11. After the code past screenshot of output which demonstrates every feature of our project separately
12. Before every function of our project, there should be one header which should contain below things as

- Name of function
- Input parameters
- The return value of the function
- Description of the function and its use in the project

At the end of this documentation please write answers of the below questions

1. What is mean by file system?
2. Which file systems are used by Linux and Windows operating systems?
3. What are the parts of the file system?
4. Explain UAREA and its contents.
5. Explain the use of the File Table and its contents.
6. Explain the use of InCore inode Table and its use.

7. What does inode mean?
8. What are the contents of Superblock?
9. What are the types of files?
10. What are the contents of the inode?
11. What is the use of a directory file?
12. How does the operating system maintain security for files?
13. What happens when a user wants to open the file?
14. What happens when a user calls lseek system call?
15. What is the difference between library function and system call?
16. What is the use of this project?
17. What are the difficulties that you faced in this project?
18. Is there any improvement needed in this project?

Explain the internal working of below system calls (Write the solutions in the documentation)

1. open
2. close
3. read
4. write
5. lseek
6. stat
7. chmod
8. unlink

Add a screenshot of each above command which demonstrates its use.

Explain use of below commands

(Write the solutions in the documentation)

1. ls
2. ls - l
3. ls - a
4. rm
5. cat
6. cd
7. chmod

8. cp
9. df
10. find
11. grep
12. ln
13. mkdir
14. pwd
15. touch
16. uname
17. stat
18. man
19. mkfs

Write a small demonstration program for each above system call in the documentation.

For System calls please refer to "Advanced
UNIX system programming by W Richard Stevens"

Please refer to the attached books for our getting more information about **File manipulations** and **File Systems**.

Advanced Programming in the UNIX Environment by...

Please send a PDF of your documentation in the reply of the same mail till 6th January.