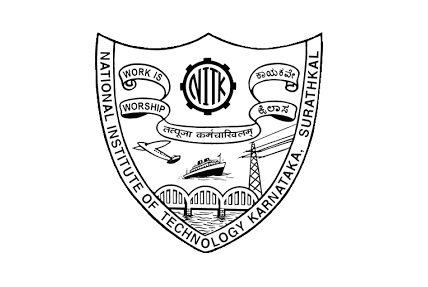
NATIONAL INSTITUTE OF TECHNOLOGY, KARNATAKA



PROJECT TITLE :-“Shell In C”

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* ***Introduction:-***

A computer's Shell is basically a direct way to access an OS's functions through a text-interface, often called the "command line." Think of it this way: you often navigate folders by double-clicking on icons. This is using a graphical user interface, or GUI, since you've got visuals to guide you ,but we are implementing only command line interface .

SHELL NETWORKING:- We will connect two computer systems by our shell by the technique of socket programming.

* ***Objective:-***

Creating our own shell and interact with different devices through networking .

How the shell relates to the keyboard ,screen, the operating system and the user’s programs

Why command line interfaces should be used instead of graphical interfaces.

* ***Description:-***

A Shell lets can do all the things, but only with text commands - no icons to view, click through, or drag around.

With the shell, it’s possible to invoke complicated programs or simple commands that create an empty directory with only one line of code.

Using the shell will take some effort and some time to learn. While a GUI presents you with choices to select, CLI choices are not automatically presented to you. However, unlike a spoken language, a small number of shell grammar required which is called shell scripting.

The grammar of a shell allows to combine existing tools into powerful pipelines and handle large volumes of data automatically. Sequences of commands can be written into a script, improving the reproducibility of workflows.

In addition, the command line is often the easiest way to interact with remote machines and supercomputers. Familiarity with the shell is near essential to run a variety of specialized tools and resources including high-performance computing systems. As clusters and cloud computing systems become more popular for scientific data crunching, being able to interact with the shell is becoming a necessary skill. We can build on the command-line skills covered here to tackle a wide range of scientific questions and computational challenges.

* ***Features***:-

Why is the Shell Useful?

Sometimes as a coder, you'll have lots of repetitive computer tasks that take away your time and productivity. Shells let you condense complex tasks into simple commands that do all the work.

ADD ON FEATURES:-

* Dynamic memory allocation
* File handling
* Shell scripting
* ***Language specification:-***

version C 99 “C” programming language.