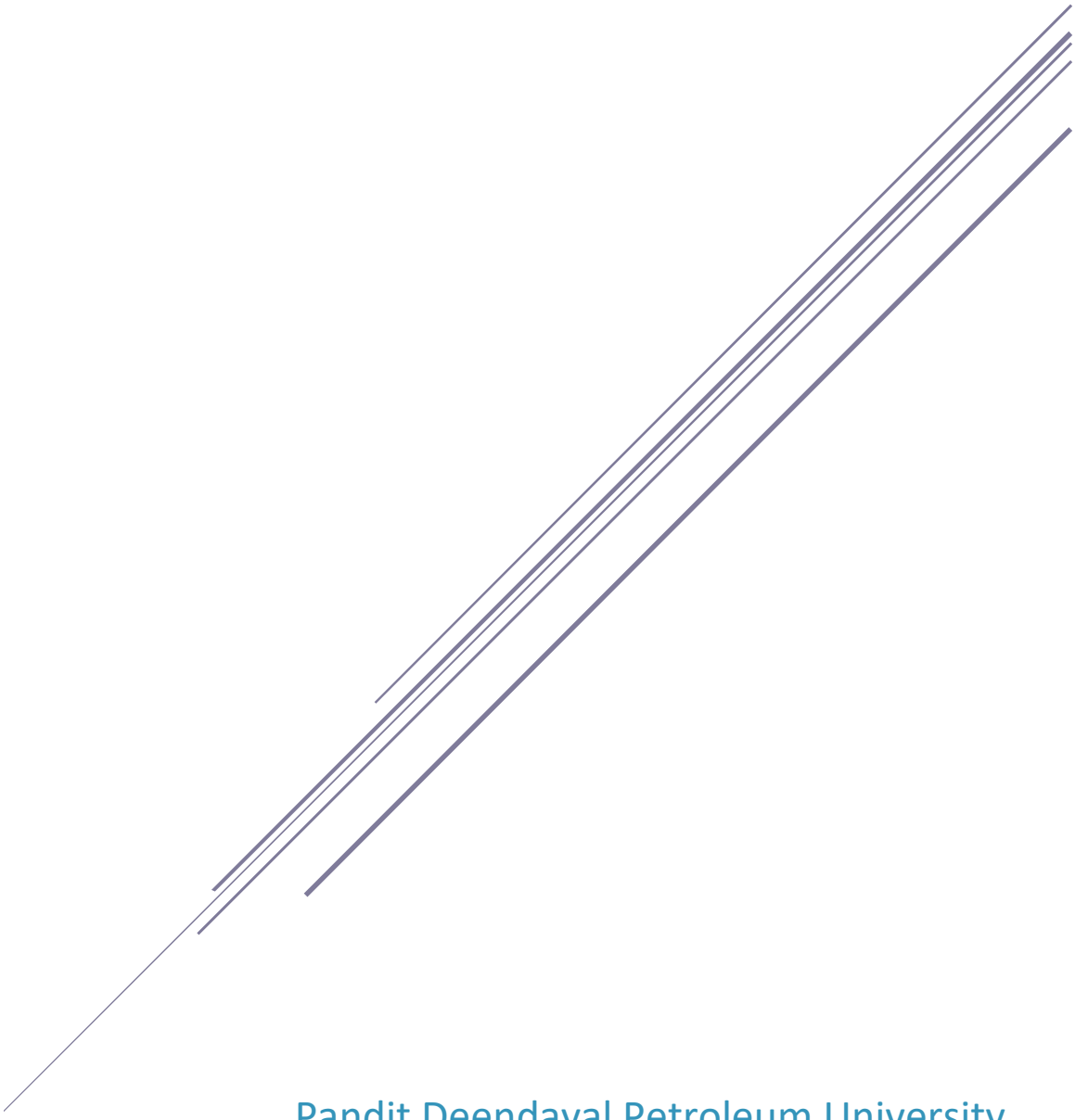
README FILE

OPERATING SYSTEMS PROJECT

Scheduling Algorithms GUI



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CE'18

README FILE

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Starting with the GUI:

*The user will need JDK and NetBeans installed in their computer system. We have uploaded it as a NetBeans ZIP(.zip) Project folder.

1. NetBeans Installation:

Link: NetBeans IDE 8.2 Installation Instructions

2. ZIP file in NetBeans:

a. Menu -> File
b. File -> Import Project -> From ZIP
c. Select the folder named “OS_Lab”

3. Starting the GUI:

a. Project -> OS_Lab -> Source Packages -> “os_lab” -> “Scheduling_Algo.java”
b. Shift+F6 (to run the file)

4. Editing the Project:

a. Project -> OS_Lab -> Source Packages -> “os_lab” -> “Scheduling_Algo.java”
b. You can edit the code from the Source Panel and to edit the design, go to the Design Panel.

   Sufficient comments have been given in the code so as to understand each and every component of the Project thoroughly.

* For detailed understanding of Implementation refer this Video:

https://youtu.be/m-a8-nxlg38

Steps for Understanding GUI:

1. A dropdown for choosing one of the 8 Scheduling Algorithms (**FCFS, SJF, LJF, SRTF, LRTF, Priority, Pre-emptive Priority**) is available at the top left.
2. The I/O button when clicked will make the table that contains columns of I/O and CPU time separately, i.e., advanced stage problems.
3. The Text Area labelled “No. of Process” and “TQ” (time quantum) has to be filled by the user as per requirement.
4. As soon as the user will enter “No. of Process”, a table will be displayed in the larger text area.
5. The user can insert values on their own, or also generate random values using the “Random” button.
6. When the user clicks on the “Start” button, the Clock will start and the CPU_Q (and the I/O_Q, if opted by the user) will show the progress of the process completion.
7. The user will be able to view the charts for Efficiency, avg. TAT, avg. WT, and Gant Chart for the same.
8. If, user wants solutions to the same question for different algorithms, he can click the “Reset” button and the “Start” button to proceed with the change in the algorithm. This will reset the Charts and Other queues’ values, but the table entries will remain intact.
9. To reset all the table values, simply change the “No. of process” value.

***NOTE**: For Priority Algorithms and vice-versa, all the values will have to be changed as the row for “priority” will not be displayed if not so.