



Ain Shams University

Faculty of engineering

Computer and Systems Engineering Department

Manuel for using the scheduler program

Name: فادي مدحت فوزي جرجس

Section: 2

- At first when the program opens, this screen will appear.

(The program is initialized with 5 processes used for the testcases in the screenshots)

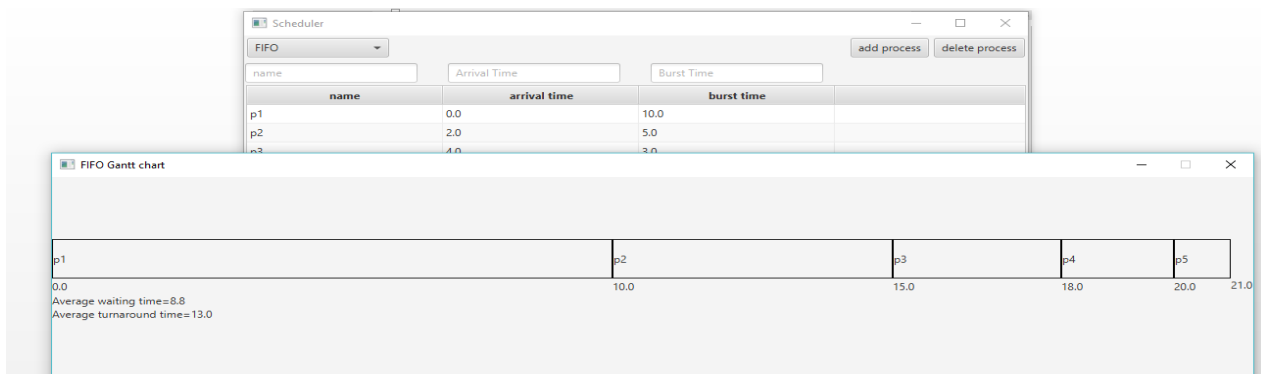
The Scheduler window displays a table with 5 processes (p1 to p5) and their arrival and burst times. The 'Select an algorithm' dropdown is set to 'Select an algorithm'. The 'add process' and 'delete process' buttons are visible in the top right, and the 'schedule' button is at the bottom right.

name	arrival time	burst time
p1	0.0	10.0
p2	2.0	5.0
p3	4.0	3.0
p4	6.0	2.0
p5	7.0	1.0

- First of all, you need to select an algorithm from the list in the top left corner. If the user clicks the schedule button without selecting an algorithm, the program won't work.

The Scheduler window shows the same table of processes. An error dialog box is displayed in the center, stating 'You must choose an algorithm' with a 'Close this window' button. The 'schedule' button is visible at the bottom right.

- If the user chooses a certain algorithm then he/she has to click on the schedule button, then the Gantt chart will pop up in a new window.



- In case the user chooses shortest job first or priority, then he should choose preemptive or non preemptive. Nonpreemptive is chosen by default.
- If the chosen algorithm is priority, then a new column will appear in the table.
- If the chosen algorithm is round robin, a new text field will appear for the quantum.

- If the user didn't enter a quantum while choosing round robin, a new alert box will appear telling him to specify the quantum.

The screenshot shows the 'Scheduler' application window. The 'round robin' algorithm is selected in the dropdown menu. A text field labeled 'quantum' is present but empty. Below the input fields is a table with columns 'name', 'arrival time', and 'burst time'. The table contains five rows of data: p1 (0.0, 10.0), p2 (2.0, 5.0), p3 (4.0, 3.0), p4 (6.0, 2.0), and p5 (7.0, 1.0). An error dialog box is displayed in the center, stating 'Please enter a valid number for the quantum!!!' with a 'Close this window' button. The 'add process' and 'delete process' buttons are at the top right, and the 'schedule' button is at the bottom right.

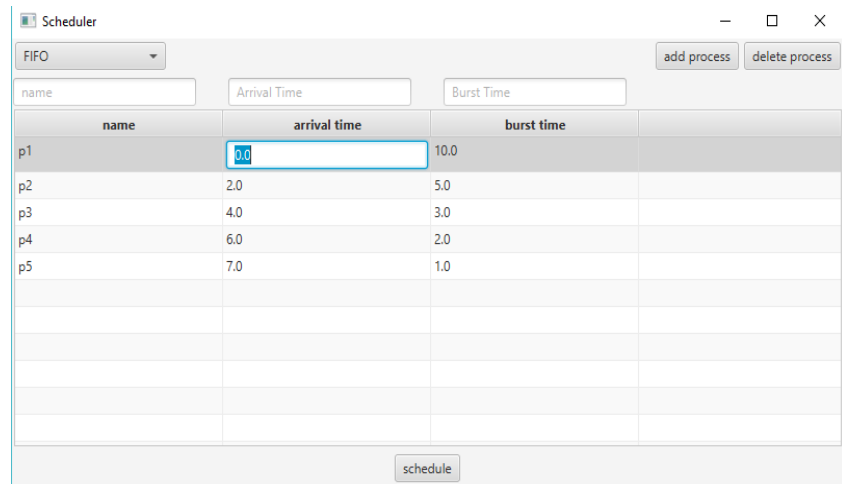
- To enter a new process, you should enter a name for the process, its arrival time and its burst time in the text fields and also priority in case of priority scheduling then click on add process button.

- If the user clicks add process without specifying the text fields for the new process or if the input data is not valid the program won't work.

The screenshot shows the 'Scheduler' application window. The 'FIFO' algorithm is selected in the dropdown menu. The 'add process' button has been clicked, and a new row 'p6' has been added to the table. The 'name' field contains 'p6', the 'arrival time' field contains 'sss', and the 'burst time' field contains '1'. An error dialog box is displayed in the center, stating 'Please enter numbers not strings!!!' with a 'Close this window' button. The 'add process' and 'delete process' buttons are at the top right, and the 'schedule' button is at the bottom right.

- To delete a process use delete button schedule.

- Also you can edit the cells of the table by double clicking on it.



The screenshot shows a window titled "Scheduler" with a standard Windows-style title bar (minimize, maximize, close buttons). Inside the window, there is a dropdown menu set to "FIFO". To the right of the dropdown are two buttons: "add process" and "delete process". Below these are three input fields labeled "name", "Arrival Time", and "Burst Time". The main part of the window is a table with the following data:

name	arrival time	burst time
p1	0.0	10.0
p2	2.0	5.0
p3	4.0	3.0
p4	6.0	2.0
p5	7.0	1.0

At the bottom of the window is a "schedule" button. The cell containing "0.0" in the first row of the table is highlighted with a blue border, indicating it is currently selected or being edited.