How to use the best Memory allocator App😊

Quick Summary

This is an easy 3 step - 3forms application which means you can't go through the next step until you finish the current one with a good validation to the input data in each step.

How to use it?

Step1 : Enter memory size and click the button ok if it's a valid data you can go to step 2

Step 2: you have to provide the number of holes in the memory and then click the button setSize ,then another dialogue form will pop up to enter data of each hole ,once you are done click ok

Step 3: provide the number of processes you want to allocate and click the button allocate in order to open another form that allows you to enter the data of each process ,once you are done click ok you will be back to the main form after going through the 3 steps you will notice a button labeled 'Good to Go 'is now active

Note:this step is optional you can skip it and click the button 'Show holes',As you can later add process by process by clicking the button 'Add process' in the Layout form.

Ready For Magic !! ... Click the button 'Good to Go' :)

Bonus

- Application supports the Worst Fit Allocation type

Extra Functions

- *You can define the allocation type for each process when you are adding them.*

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- *you can either enter the number of processes first and then enter the information of these process and then allocate them with one click or you can skip step 3 and click the button 'good to go' and you can allocate process by process from the button 'add process'.*

- **You can de-allocate any process by clicking on it and then click the button de-allocate**
- **If any process can not fit in any place it will be shown in the waiting processes section**
- **the program will automatically allocate your waiting processes if any can fit in memory After every de-allocation**
- **When you click any process a bunch of labels will be shown to indicates all information about that process.**
- **You can de-allocate more than one process by clicking on them you will notice it's color changes to red then you can click the button de-allocate to delete them ☺**

Snapshots

- Test case

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Enter Holes

Holes Info

Hole 1	40	0
Hole 2	50	45
Hole 3	30	100
Hole 4	80	150

Ok

Memory Allocation

Memory A

Step 1

Enter Memory Size 300

Step 2

Holes Number : 4

Step 3

Process Number : 5

Enter Processes

Process Info

P 1	20	First Fit ▼
P 2	40	Best Fit ▼
P 3	30	Best Fit ▼
P 4	40	First Fit ▼
P 5	15	Best Fit ▼

OK

Layout

Memory Layout

Color Map

- ⬛ allocated
- ⬜ Free Space
- 🟩 allocated process
- 🟦 Allocated Process size <=10
- 🟥 Selected Process

Waiting Processes

Memory scale: 0, 5, 20, 20, 40, 40, 45, 55, 95, 95, 100, 100, 130, 130, 150, 190, 230, 230

P 5
P 1
P 2
P 3
P 4
Hole 1

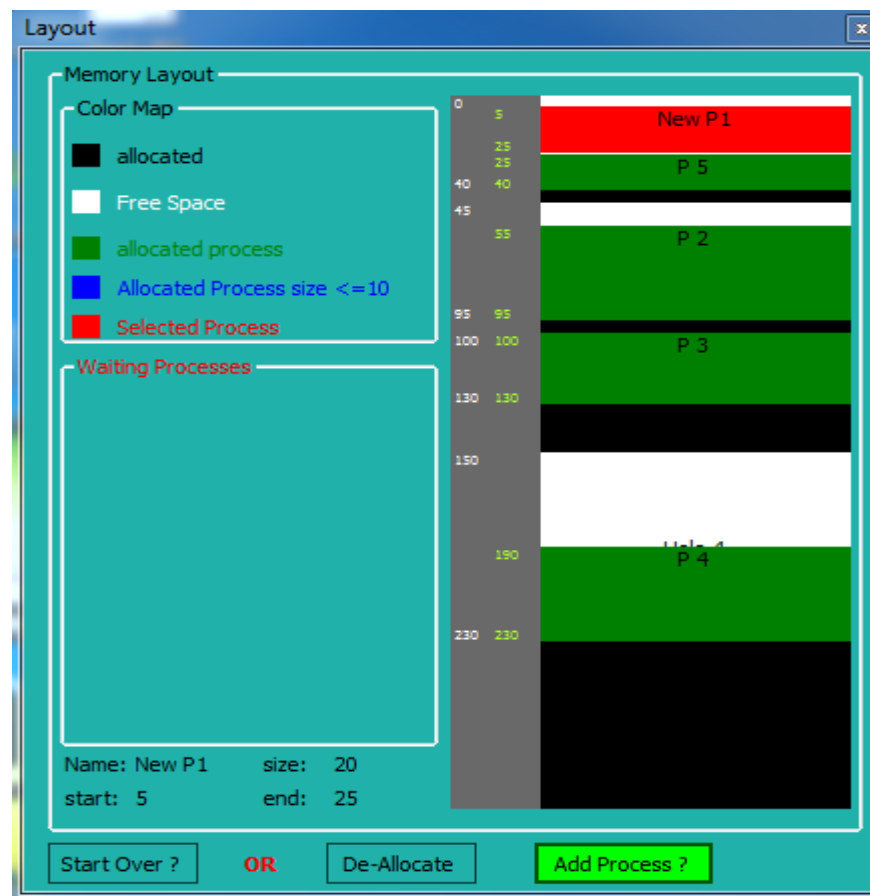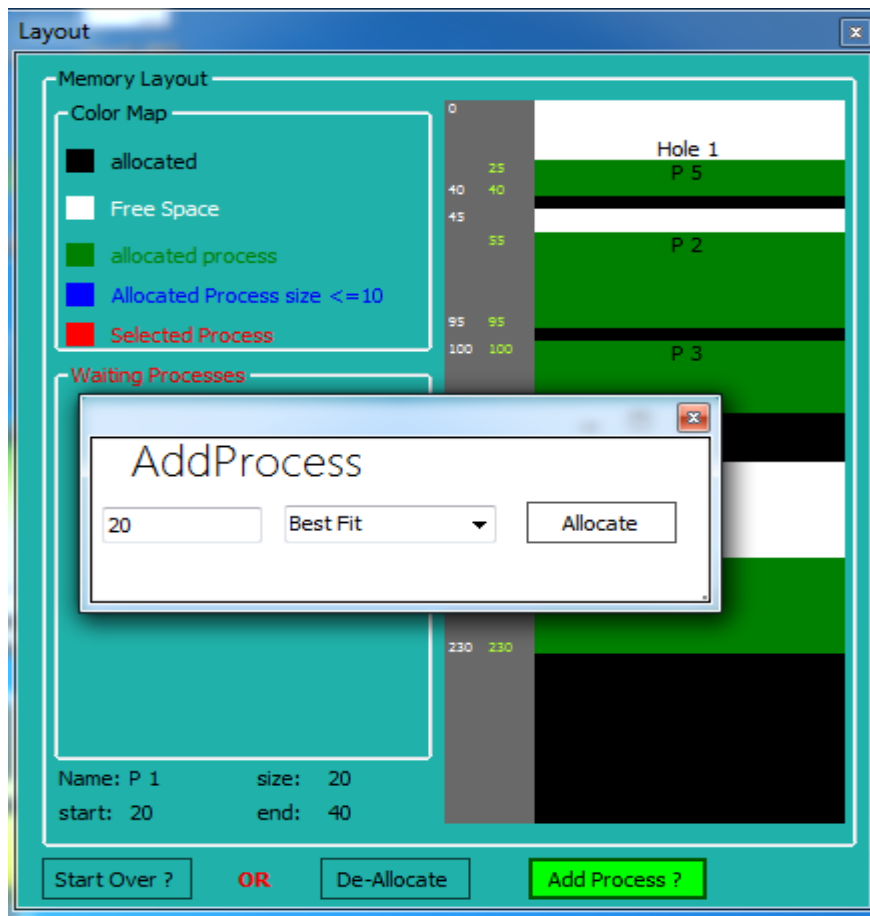Start Over ?   OR   De-Allocate   Add Process ?
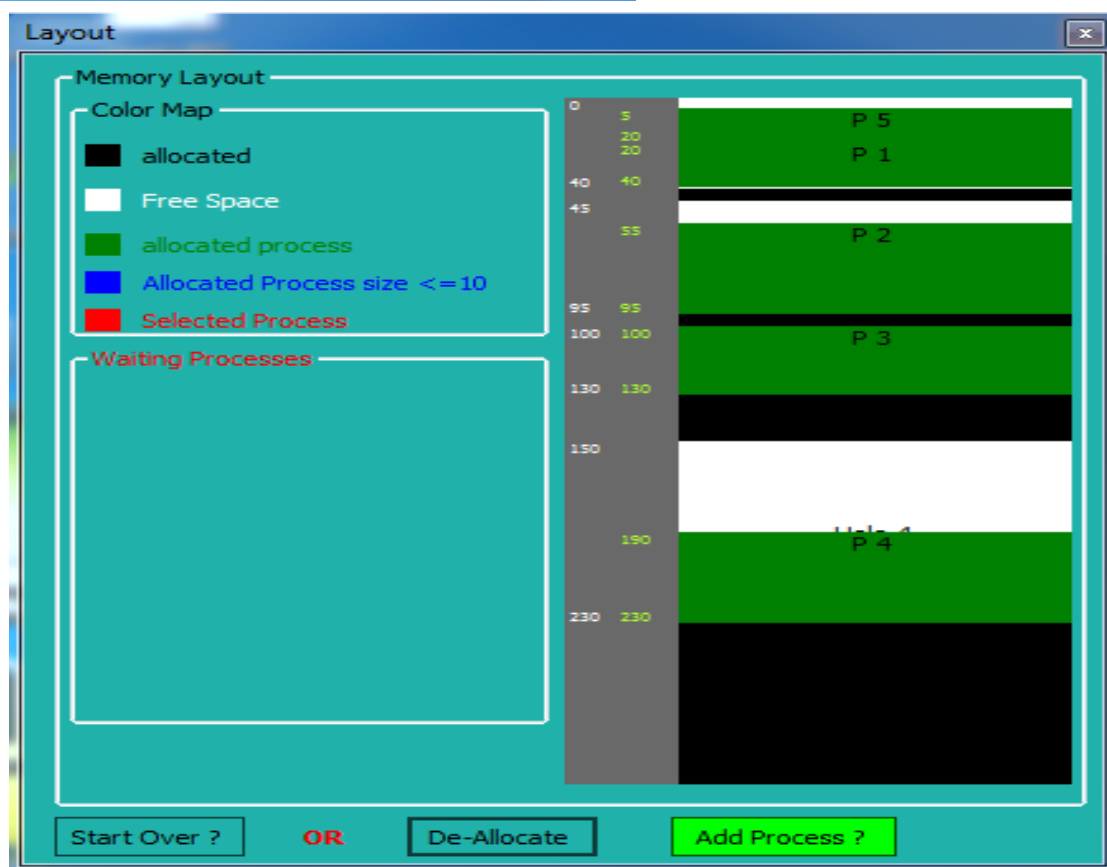
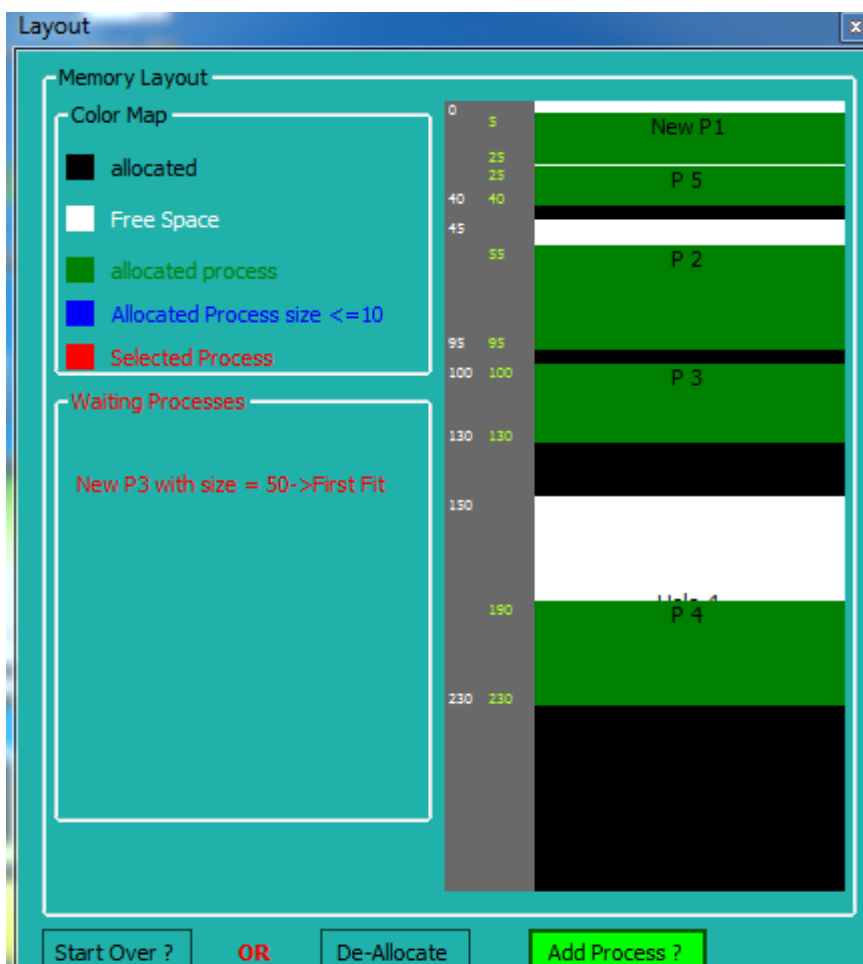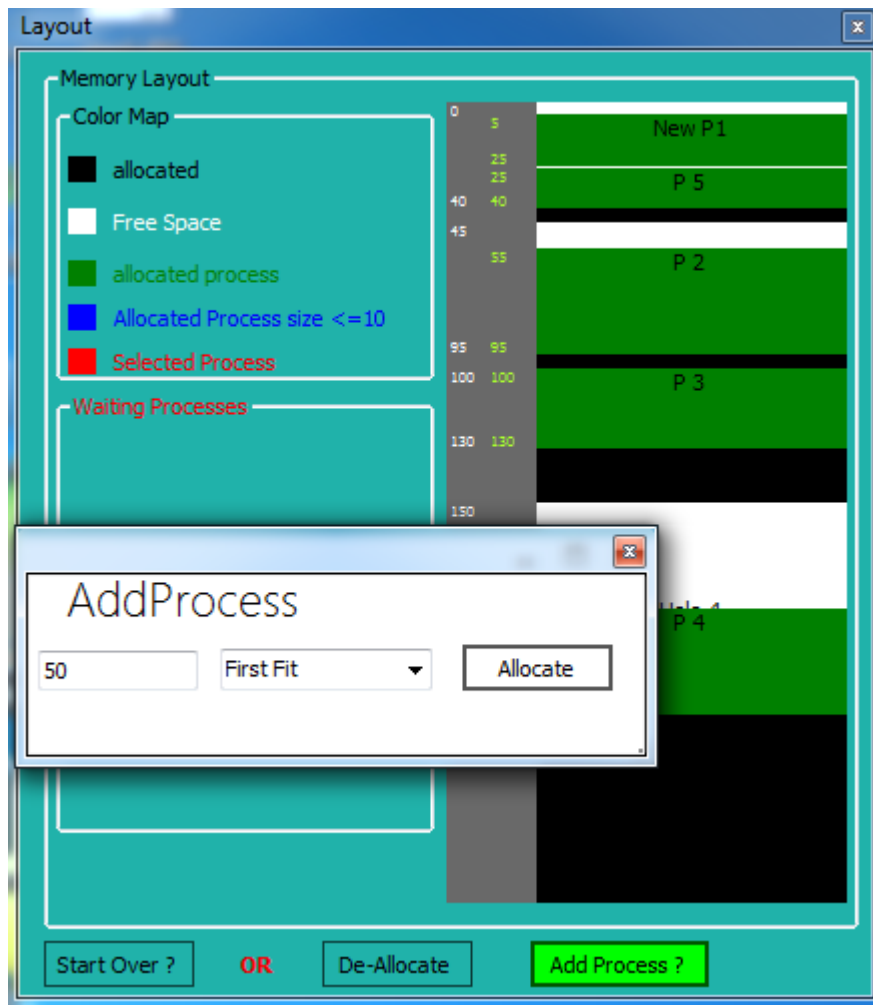# How to use the best Memory allocator App☺

- De-allocating P1
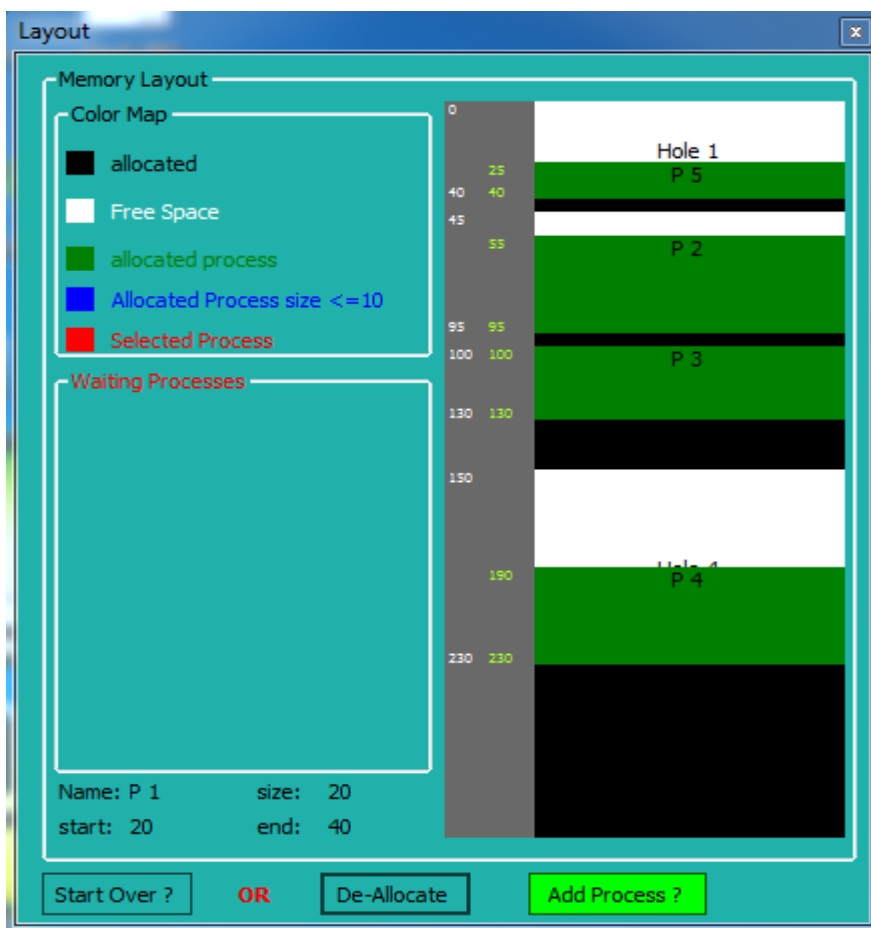
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- Allocating another process through the button 'Add process'

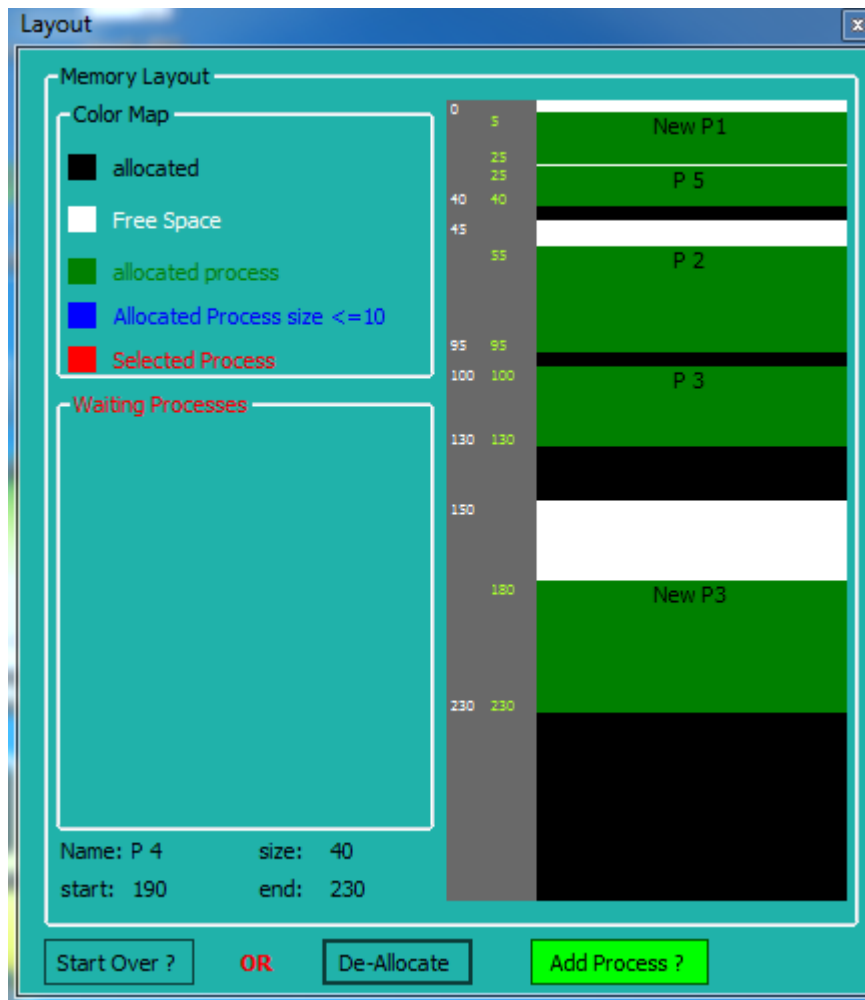# How to use the best Memory allocator App😊

- Trying to add a process that cannot be fit in memory.

As you can see it has been added to the waiting section.

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- Trying to de-allocate P4

After de-allocating p 4

Now the waiting Section is clear, and the process was waiting 'New p3' is now allocated