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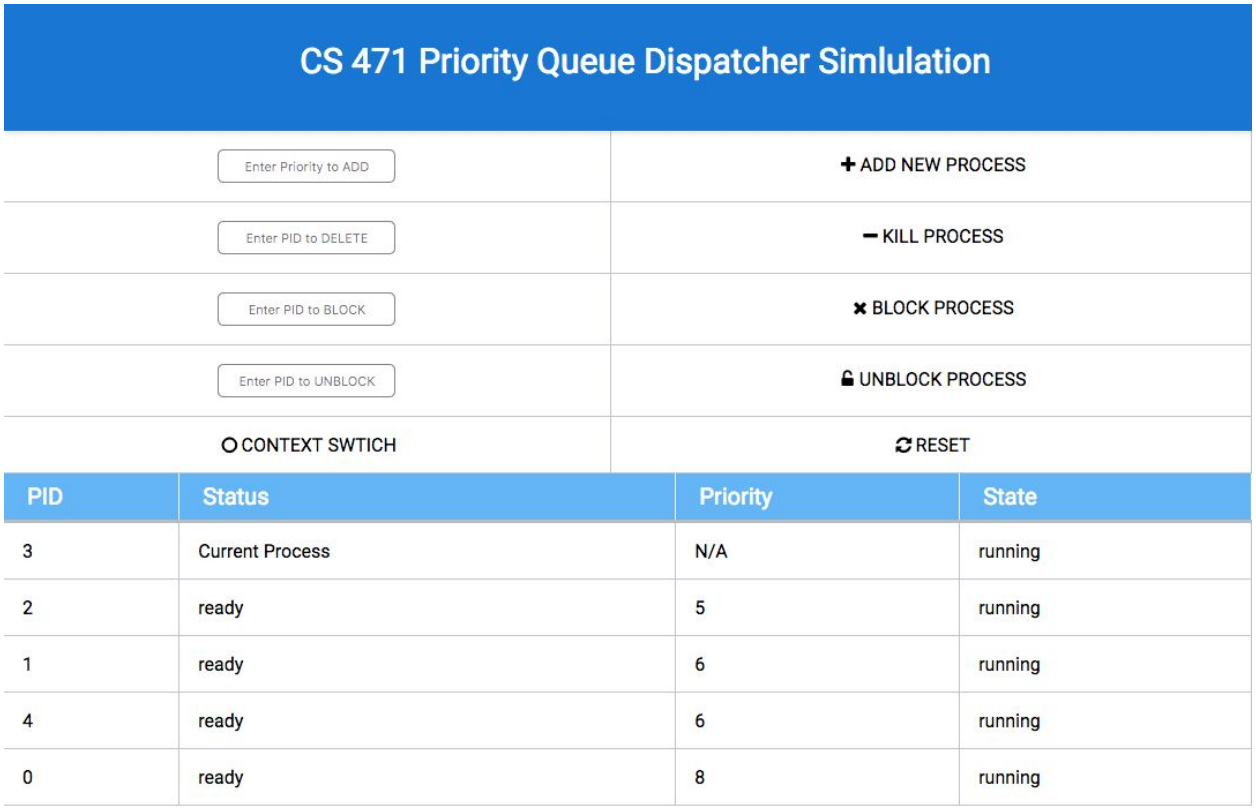
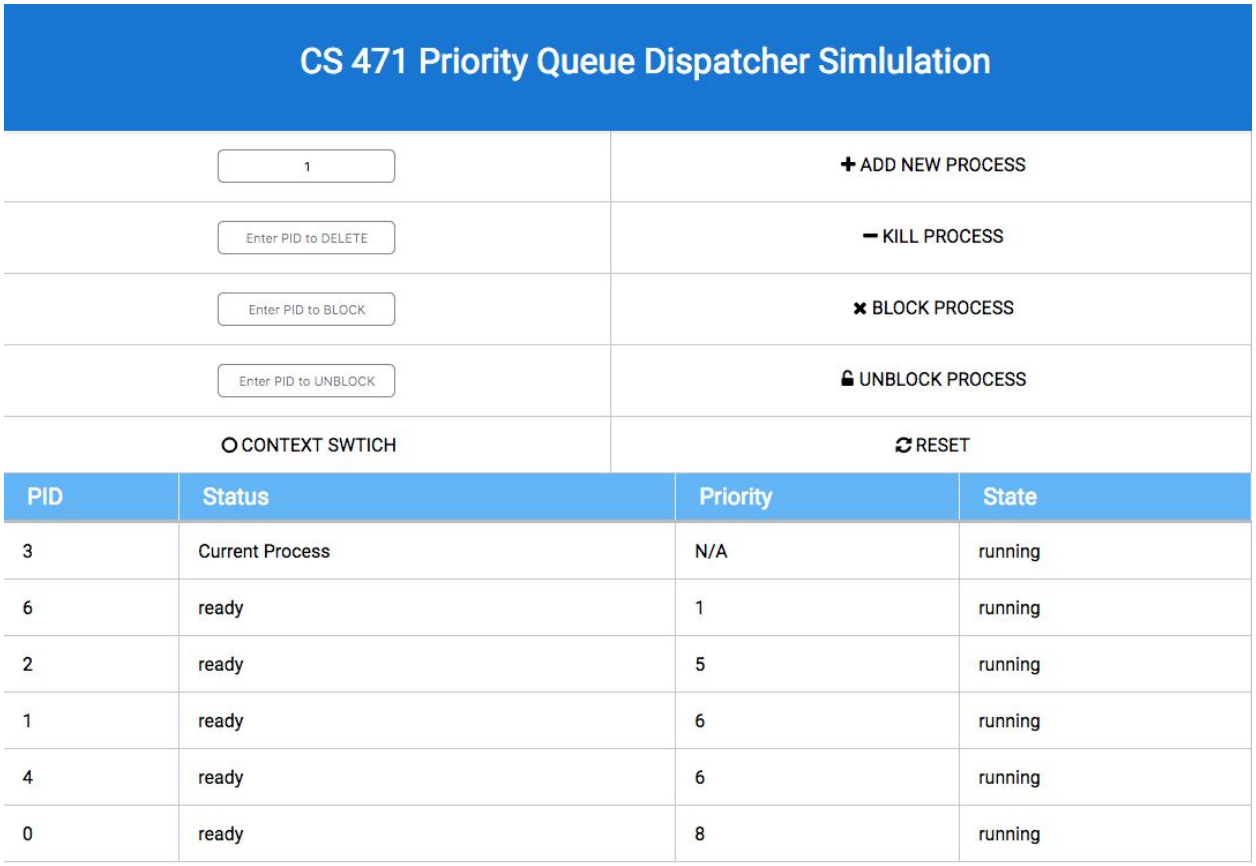
CS 471 Priority Queue Dispatcher

To run the program, simply unzip the folder main folder, then open index.html with google chrome or mozilla firefox.

This is the starter application. 5 PID's and their priorities are randomly generated.



PID	Status	Priority	State
3	Current Process	N/A	running
2	ready	5	running
1	ready	6	running
4	ready	6	running
0	ready	8	running



From the image above, you can add a new process and it will assign a unique PID with the corresponding input priority.

CS 471 Priority Queue Dispatcher Simlulation

Enter Priority to ADD	+ ADD NEW PROCESS
Enter PID to DELETE	− KILL PROCESS
0	✖ BLOCK PROCESS
Enter PID to UNBLOCK	UNBLOCK PROCESS
CONTEXT SWTICH	RESET

PID	Status	Priority	State
3	Current Process	N/A	running
6	ready	1	running
2	ready	5	running
1	ready	6	running
4	ready	6	running
0	blocked	8	blocked

You can block processes which will appear at the bottom of the table and change the running status and state.

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Enter Priority to ADD	+ ADD NEW PROCESS
Enter PID to DELETE	− KILL PROCESS
Enter PID to BLOCK	✖ BLOCK PROCESS
0	UNBLOCK PROCESS
O CONTEXT SWTICH	RESET

PID	Status	Priority	State
3	Current Process	N/A	running
6	ready	1	running
2	ready	5	running
1	ready	6	running
4	ready	6	running
0	ready	8	running

Unblocking the process return the PID to ready and running.

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Enter PID to DELETE	− KILL PROCESS
Enter PID to BLOCK	✖ BLOCK PROCESS
Enter PID to UNBLOCK	UNBLOCK PROCESS
O CONTEXT SWTICH	RESET

PID	Status	Priority	State
6	Current Process	N/A	running
2	ready	5	running
1	ready	6	running
4	ready	6	running
0	ready	8	running

A context switch bubbles up the process with the lowest priority and “executes” the current process.

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Enter PID to DELETE	− KILL PROCESS
Enter PID to BLOCK	✖ BLOCK PROCESS
Enter PID to UNBLOCK	UNBLOCK PROCESS
CONTEXT SWTICH	RESET

PID	Status	Priority	State
2	Current Process	N/A	running
1	ready	6	running
4	ready	6	running
0	ready	8	running

CS 471 Priority Queue Dispatcher Simlulation

Enter Priority to ADD	+ ADD NEW PROCESS
Enter PID to DELETE	− KILL PROCESS
Enter PID to BLOCK	✖ BLOCK PROCESS
Enter PID to UNBLOCK	UNBLOCK PROCESS
O CONTEXT SWTICH	RESET

PID	Status	Priority	State
1	Current Process	N/A	running
4	ready	6	running
0	ready	8	running

CS 471 Priority Queue Dispatcher Simlulation

Enter Priority to ADD	+ ADD NEW PROCESS
Enter PID to DELETE	− KILL PROCESS
Enter PID to BLOCK	✖ BLOCK PROCESS
Enter PID to UNBLOCK	UNBLOCK PROCESS
CONTEXT SWTICH	RESET

PID	Status	Priority	State
4	Current Process	N/A	running
0	ready	8	running

CS 471 Priority Queue Dispatcher Simlulation

Enter Priority to ADD	+ ADD NEW PROCESS
Enter PID to DELETE	− KILL PROCESS
Enter PID to BLOCK	✖ BLOCK PROCESS
Enter PID to UNBLOCK	UNBLOCK PROCESS
O CONTEXT SWTICH	RESET

PID	Status	Priority	State
0	Current Process	N/A	running
1	ready	1	running
2	ready	7	running
3	ready	8	running
4	ready	8	running

Pressing the reset button resets the web page with newly populated PIDs and corresponding priorities.