Assignment Template Form (Process Scheduling)

Student Name: NATHAN ORMOND
Student ID: 16500781

The assignment template form is shown below and can be downloaded from Moodle and requires you to complete the following.

Assignment Functionality Completed:

FCFS scheduler

- ☐ First Come First Served (FCFS) scheduler code partially implemented and tested
- ☑ First Come First Served (FCFS) scheduler code fully implemented (sorting) and tested

SJF scheduler

- ☐ Shortest Job First (SJF) scheduler code partially implemented and tested
- ☑ Shortest Job First (SJF) scheduler code fully implemented and tested

Round Robin scheduler

- ☐ Round Robin (RR) scheduler code partially implemented and tested
- ☑ Round Robin (RR) scheduler code fully implemented and tested

Console menu

- ☐ Application has a menu system to allow different scheduling algorithms to be selected and tested from the console partially implemented
- ☑ Application has a menu system to allow different scheduling algorithms to be selected and tested from the console fully implemented

File read/write

- ☑ File read/write code to load datasets and store results

Code commented

- ☐ Code is well presented with occasional comments
- ☑ Code is well presented with sensible high quality comments explaining algorithms
- ☑ Comments incorporated on advantages and disadvantages of schedulers

Screenshots

- ☑ Screenshots of FCFS scheduler (3 assignment datasets))
- ☑ Screenshots of SJF scheduler (3 assignment datasets)
- ☑ Screenshots of RR scheduler (3 assignment datasets)

Additional Comments

Please indicate any features that have been partially implemented or any other issues that need to be drawn to the attention of the markers.

Self documenting code - variable / function nomenclature.

NATHAN ORMOND
16500781

Mark Scheme: The programming task will be graded in a number of areas, attracting a number of marks for each. Guidance on the assessment criteria for each area is included below. Note that in each area you must work upwards in terms of features implemented to achieve the maximum mark for that area.

First Come First Served (FCFS) scheduler		**Shortest Job First (SJF) Scheduler & menu system**		**Round Robin Scheduler**		**Code Comments/Screenchots**	
FCFS scheduler implemented and tested	15 marks	Evidence of an attempt at menu system and SJF scheduler partially implemented and tested	10 marks	Round Robin scheduler partially implemented and tested and incorporated into menu system	10 marks	Code is **poorly** or **moderately** presented, with **occasional** comments and assignment template completed and submitted	2 marks
						Code is **well** presented, with **sensible** comments covering advantages/disadvantages of scheduling algorithms	9 marks
FCFS scheduler fully implemented allowing processes to be sorted according to arrival time and tested with all assignment datasets with performance metrics calculated and printed	10 marks	SJF scheduler fully implemented and incorporated into a console menu system with performance metrics calculated and printed	15 marks	Round Robin scheduler fully implemented with performance metrics calculated and printed and incorporated into menu system	15 marks	Screenshots for each algorithm for each dataset (3x3)	9 marks
				File read/write code	5 marks		
Section Total	25		25		30		20

25 25 30 20

For example, a student earning 25 marks in the *FCFS section*, 15 marks in *SJF section*, 10 marks in *Round Robin section*, 10 marks for c*ode quality* and *5* marks for the *screenshots of scheduling results* would achieve an overall mark of 65% (25 + 15+ 10+ 10+5) for this element of the portfolio. If you need any help in understanding this assignment please talk to the tutor who takes you for your laboratory sessions or arrange to see Dr Alan Crispin.

$\frac{100}{100}$ => 100%