

The Research and Publication Unit of the Department of CSE provides high end PC to students who want to do research that requires machine with high computation power. But the student cannot reserve a PC, his/her supervisor will reserve the PC. The Head of the Department has asked you develop a PC Reservation System which will be used by the faculty member to reserve/book a for a specific purpose. Each PC has different capacity of HD, RAM. If the PC has a GPU, we need to know the VRAM of that GPU as well. Faculty members will reserve a PC depending on his/her requirements (HD size, RAM, whether GPU is needed and also VRAM). You are requested to develop an application for this purpose. The application will have some functionalities such as add the information of a PC in to the system, reserve a PC for a specific purpose, view the details of a specific PC, view the list of available PCs and their details, and make a PC available after the faculty is done with the PC. Each PC is identified by the serialNo. HD size, RAM, whether the PC has GPU, and VRAM of the GPU, and a status showing whether the PC is reserved or available, and reservedBy (the name of the person who reserved the PC).

Required functionalities of the application:

a) Add the information of a PC into the system.

When a new PC is added to the system, all information of that PC should be added and it should be available for reservation.

b) Reserve a PC

For this option, user will enter the serialNo. If the PC is available for reservation, the reservation status of the PC will be updated. If the PC is already reserved, display a message saying. "The PC is already reserved. Please try for a different PC."

c) View the detail of a specific PC.

For this option, user will enter the serialNo and the application will show all info of that PC. If the PC is not available, print "Invalid Serial Number. Please check the number."

d) View the details of all available PCs.

e) Make a PC available.

For this option, user will enter the serialNo of the PC. If the PC is already reserved, update the reservation status of the PC to available. If the PC is not reserved, display a message saying. "The PC is already available."