After intensive research we landed upon an article published by M.Teresa Doherty and Erin White at Virginia Commonwealth University in Richmond Virginia who were stuck in the similar situation as we are. At VCU, there were more students who wanted a study space at the libraries than the actual space (Doherty, Erin). At VCU, the study space was allotted on first come-first served basis and so many students just ended up without the study room. Synonymously at IU, we have more students who want to use the computers and less number of labs. To resolve this issue, VCU thought of setting up a reservation system to reserve rooms in advance. and they could do it either by letting students to book by hand (signing sheets) or by using an integrated online booking system (Doherty, Erin).

VCU libraries implemented a program called OpenRoom, which allowed students, faculty, and staff to reserve rooms in the library ahead of time. The software would locate the nearest lab on campus to the user and specifically the room number. They would be able to see how many computers are unreserved in that lab, and the
allotted amount of time each one has on it. The user then can reserve the spot by using the university ID (Doherty, Erin).

Public service managers at VCU worked with staff in the curriculum department to decide on reservation policies. In doing so they stirred up four policies. The first one being that reservations can only being a two hour maximum, and done in thirty minute increments. The second is how much time can be reserved each week, and they decided on a max of six. Next is the frequency allowed, which ended up being one every two days or three per week. And last is the window limit. The individual who placed the reservation does not arrive to the room to claim usage by 15 minutes into the start time of the reservation, it would be considered forfeit and available to any other patron (Doherty, Erin). At IU we could use the similar constraints and policies so that all students get access to computer systems.

There are also alternative programs like Room Reserve, Signup, and Spaces that are very similar to the software OpenRoom. These programs also make room for customization for different needs of a company or in this case a university. It checks authentication of the user, sends reminder to the person. That way it’s not forgotten, and therefore making that reservation a complete waste of time. They offer a calendar of when a room is reserved, so you can plan your schedule accordingly. There is also an app, so it’s easier for people to view and book a spot. This can easily be implemented for computers instead of rooms, making for an easier and cheaper plan. (Michaelson)

A prime example for the range this concept can cover is noted in an additional article published by the Congressional Budget Office entitled “Computer Reservation Systems (CRS), discusses how CRS’s are extremely helpful in influencing travel agents’ recommendations by monitoring the behavior of individual agents and allowing for airlines to implement plans that will have the most positive impact on their flight recommendations. This connects to our idea of implementing a software that has the
capability of registering student’s towards a designated computer. In the 1970s when airlines began altering and improving their internal reservation systems to make sale of airline tickets through travel agents more efficient, the computer reservation systems made is easy access for agents to access information and make reservations on virtually any scheduled carrier. And as an added benefit, the high approval rate for CRS’s results that most carriers that operate in different parts of the country efficiently with the aid of CRS’s. Thus we can see the influence of computer reservation systems on bookings, similar to our idea of developing a software to implement for students to reserve computers.

The concept we are trying to pitch may seem a bit more familiar than one would initially think; it is used in a number of different fields but all for the same common goal. It can be used to store and retrieve information and conduct transactions related to air travel, hotels, car rental, or activities. Originally designed and operated by airlines, Computer Reservation System operations were made to book and sell tickets for multiple airlines, and of course are used across the market, which now are formally known as Global Distribution System. But don’t establish limitations just yet, Modern GDSes typically allow users to book hotel rooms, rental cars, airline tickets as well as activities and tours (Wardell).

