

Project Description (project1)

This project is for a loaner system for IT department in big company.

I worked for IT department for a big company last semester, we had a lot of request from our colleague to have some equipment as loaner from our department for a temporary solution for some emergency situation, such as laptop breaks and need 2-3 days to get that fixed by manufacture, need to do a presentation but lack of dongle, need a charger for international business trip. I found we had trouble manage our loaner equipment. Here are the problems I found:

1. Lack of stock information dynamically
2. Need manually record the person who checked out the equipment
3. Do not have a system to remind colleague to return the loaned equipment
4. Cannot reserve the equipment
5. Do not know the information of the equipment itself (such as warranty information, models of a computer)
6. Do not know which equipment that a specific user used, in case the user need to fetch the files on the equipment (for loaner laptop or desktop)

This project is a single page application website to solve these problems, we are target at our internal users, all of which have a company email associate with office 365, we will force user to login to this account to fetch the user information. We will record everything towards the loaner, such as stock status, check in or check out, reserve the equipment by user directly and even remind the user to return the equipment. Also, for all the loaner computers, we will connect the information with Dell's warranty information date base so that we will know the information for the computer.

Here is some important ideas that this website have:

There will be 4 different human users:

- Admin
- IT agent
- General user
- Anonymous User

Every human user expect for anonymous user will be login as office 365 company's account for security reasons. And according to the login information, we can divide the user to different group automatically.

The domain objects and relationships:

- equipment
- equipment kind
- equipment model
- loaned list in general
- loaned list for each person
- reserved list in general
- reserved list for each general user

- free to loan list

For each human user,

(goals the user could accomplish)

- Admin can create, remove, update anything
- IT agent user can move the item from free to loan list to loaned list (check out), vise versa (check in), check stock, reserve loaner for general user
- General user can check stock, reserve item
- Anonymous User only can check the list

(relations with other users)

- Admin can manage IT agent, (add/remove the user from general user to IT agent)
- IT agent can help general user to update the list under their name

(relations with domain objects)

- Admin have all the visit/add/update/delete rights for all the equipment kind, equipment, loaned list in general, loaned list for each person, free to loan list
- IT agent can update the equipment from on list to other, visit/update general user's all list, visit/update list in general
- General user can only visit their own list, update the their own reserved list

For each domain object

(relations with other domain objects)

- All the domain project has equipment
- All equipment has a model