Introduction Problem Statement

The pet grooming shop has been successfully grooming pets for past three years. Thus their business amount increases out of their control. The current cumbersome and inefficient paper-based system is no longer suitable for increasing user demands so that the shop is in need of a more powerful and convenient system.

Solution

A website pet groom system is created by the group. Function of the website is divided into mainly two parts: Customer and Manager. The website enable customers to seek grooming services for their pets according to information about groomers such as groomer rank and customer feedback. Customers can also view FAQs as well as post their own question on website for help. As for managers, The website provide alternatives for them to efficiently manage the whole website. Managers log in the website with their manager account and implements their maintenance work.

Strength and Weakness

S:

The new system provide customers with access to past records to edit or cancel their past appointment, which makes appointment more flexible. Q&A zone guarantees effective communication between customers and managers.

W:

The connection of the website isn't stable, which might trigger data lost.
The system have difficulties dealing with high volumes of data in case of a lot users visit website at the same time.

Software Development Process

The group set one week as a sprint. Each Wednesday a meeting will be held to update current progress about the project. There are eight group members in which one product owner and two scrum master is selected. Member who act as product owner search for information about users requirement to set further target and two scrum master set weekly target for developers to guarantee continuous progress of the website development. Specific scrum framework is shown below.

The product owner of the team makes product backlog, which contains all the functions, needs and improvements of next sprint. In sprint backlog indicates priority of each products in the specific sprint.

The transparency value of a scrum indicates degree of scrum master communicating with product owner and development team. High transparency value can guarantee safety and produce appropriate decision[1].The group holds weekly meeting in which scrum master exchange their ideas with product owner and development team.

After the group decide PBIs they want to realize, eight group members are divided into two smaller group for front-end and back-end, with one scrum master allocated to each group. Two groups set their own weekly target separately with two weeks left for connecting front-end with back-end.

Solution:

Apply expert's technical supports.

Staff shortages:

The group only have eight members and they are university students who have different class schedules. Absence of any members could lead to serious Staff shortages problem, which results in delay of project progress.

Solution:

Take a backup staffing plan.

Security Issues

Register a account need to use email and phone number. As an online system there are risks for data leaking.

Solution:

Construct a stable security infrastructure with continuous and strict monitoring of the system.

Conclusion

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Group work

Group work is necessary in case of a large project. A good group should properly allocate tasks to each group member according to their abilities. To make efficient and quick decision upon changeable user requirements, the group is recommended to apply scrum frameworks and decide scrum master and scrum owner. Scrum owner and scrum master communicate and make up decision. Scrum owner listen to user requirement and search outside information while scrum master take lead on project and make weekly target for project.

Agile methods application

According to requirement, our group change traditional to agile method called scrum for developing innovative products. The method efficiently improve frequency of group communications and rationality of decisions.

Database Design

Database design apply Role-Based Access Control (RBAC) which enables different users have different level of access in the application. Such difference can make the system stand out.

Mapping table creates many to many relationships, which enables multiple grooming services assigned to a single requirement.

Future Improvement

1. Log in page shall contains more function such as looking for forgotten password.
2. Weekly meeting is not enough for sufficient communication, increase meeting time in future work if necessary.
3. To deal with staff shortage, ask for more help from surroundings.
4. To settle the problem that some group members are unfamiliar with necessary technical approach of the project. Ask members to learn relevant knowledge and technology.