Software Engineering Workshop 1 – Exercise 2

Question 1: The application 'Unilife' allows for the formation of individual and group chats. Students are able to directly message peers, lecturers, teaching assistants and class groups. Additionally, students can connect with others who share similar interest by the creation of groups chats. The app also includes a blog page, which provides information about student wellbeing, study advice, etc., and a students deals page, showing all the student discounts available. (UniLife, 2020). Another popular student life application is 'MyStudyLife'. This application aims to make your study life easier to manage" (My Study Life, 2020) by organising the student's classes, tasks, exams and personal life. The features of the application include creating tasks, setting class and task reminders, inputting uni semester schedule, and syncing this data across digital platforms, ie phone and computer. From the analysis of similar software applications, I have determined that our student life app should allow users to add scheduling/timetabling to a calendar, set tasks and class reminders, create to-do lists, sync data to the cloud, create chat rooms, directly message teachers and teaching assistants, and access existing university platforms, ie canvas.

Question 2:

Questionnaire: A key strength of a questionnaire is that they are easy to distribute, ie through email, making it possible to elicit requirements from a large and diverse population. A large population minimises the effect of outlining data, thus ensuring that the chosen requirements accurately represent the populations needs. Furthermore, questionnaires can be target towards the favoured users. By specifically asking out intended users what they need/want the developers can ensure that the requirements satisfy these needs and that the software has all the necessary feature that the users want. Another strength of questionnaires is that they are inexpensive, in turn, reducing the overall cost of the project. However, questionnaires also have many weaknesses. For instance, responses from participation can be miss interpreted by the analysis, in turn, a user need may be completely missed or inappropriately incorporated into the application. Furthermore, the responses by participants may be ambiguous, therefore, making it difficult to draw clear and concise requirements. Finally, the analysis has no way of knowing if the participants understood the question properly, consequently effecting the establishment of essential user requirements

<u>Systems face analysis:</u> By examining connecting interface systems we are able to identify data and service exchange requirements. Thus setting some clear domains regarding the integration of StudentLife with other online platform. Another strength of this elicitation technique is that it will help us to identity non-functional requirements, such as accessibility and security. However, this technique is time consuming as each system will need to be individually analysed. Consequently, extending the timeline and the cost of the project. Further adding to the cost is the payment for the analysis. Typically, this elicitation techniques needs to be conducted by someone with specified knowledge and skills, as they need to know what they are looking within the system and how to retrieve this data. Another main weakness of system face analysis is that you can not identify favoured user requirements/needs. Therefore, to identify these needs another elicitation process will need to be undertaken, which may also increase the projects timeline and cost.

Questions:

What would be the most effective way for online communication e.g. chat room, forum, etc.? Would you want the calendar feature to integrate other calendar applications? Will the app require a login? How will you integrate other online platforms, e.g. will they be redirected to the other application when pressing a tab or will they be completely integrated? How much access to the back end should the university, groups and individuals have?

References:

My Study Life, 2020, 'My Study Life', viewed 04 April 2020, <mystudylife.com>.

Unilife, 2020, 'Unilife', viewed 04 April 2020, <unilifeapp.com>.