

Experience Report

Version: R1

Group 16

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Abstract

To be filled in further releases.

Introduction

Group work always entails a learning outcome, besides accomplishing a predetermined goal set by group members. This report highlights these learning outcomes, the challenges the group faced and tackled, and both the individual and group experiences during the course of the project.

The project group is working to specify a system that creates a one-stop-shop for finding student activities around Gothenburg organized by *Chalmers University of Technology*, *The University of Gothenburg*, student organizations, and external parties. The necessity for this system stems from the many different associated student organizations and the complex collaboration between the two universities in the city. Most students receive invitations for activities from a range of these student organizations, and in some cases even both universities. Most of the organizers use different channels to send news about these activities, which can be overwhelming for students to keep track of.

Techniques

In this section, we will reflect on the techniques we have used in the creation of our requirements document.

Elicitation

As of release 1, we have conducted initial internal elicitation during the project mission phase and creativity workshop. The elicitation with stakeholders is planned for the next release.

Creative elicitation

Creative elicitation proved effective as an initial technique to flesh out the project with requirements. It remains to be seen if the requirements will align with the needs of the stakeholders, but it has broadened the topics we plan to ask them about.

One of these, the Bright Sparks technique, helped us find areas we hadn't considered yet. Such as the possibility of adding information regarding food at activities (Such as, free, vegetarian, etc.). Since organizers don't often provide this clearly at the moment, the possibility of this requirement hadn't even come to mind yet.

Another technique that proved useful was Assumption Busting. It gave us a different perspective on the project. We primarily discussed the assumption that the system had to be an app and investigated alternatives such as a student portal page, slack workspace, and newsletter.

The composition of our group made the creative elicitation work especially well. Our project has a lot of different student stakeholders, which are all represented within our group. That made it easier to relate and estimate the different perspectives these student stakeholders could possibly have. For the future releases, we plan to verify what we found by through a semi structured interview with student stakeholders from outside our group.

Specification

Context diagram

In our case the context diagram has not been very important, since almost all actors are in the same domain, and most actors communicate with each other. For this reason, the context diagram does not tell us much. However, it might prove useful for communication with others.

Use case diagram

The use case diagram was an effective way to create a more concrete scope of the system. It gave a clear overview of all the functions envisioned during the elicitation and the related actors. For release 1 the diagram has already gone through small-scale iterations where we refined the distinctions and relations between the cases. For example, we discovered UC12, which happens outside the system but is an important action for the platform to function.

Functional Requirements

The functional requirements we have specified are based on the use cases that need to be addressed. To define these requirements, we relied on the knowledge and experience of our group members. However, we recognize that further investigation is necessary, as we intend to conduct a more in-depth study of the actual users in the future.

Performance Requirements, Specific Quality Requirements, Constraints

Specifying the nonfunctional requirements has helped ensure discussion and agreement in the group about the more qualitative aspects of the application. Similarly to the other requirements, we have not elicited them directly from the stakeholders, which will be necessary for later releases.

Data requirements

The data requirements being described were generated by our group during a creativity lecture and are based on the use cases and functionalities. The requirements are also base on

the collective knowledge and experience of the team now, and not actually user data. In future releases, we intend to gather these requirements directly from the actual users. However, for now in the current stage, we find it valuable to define it from our assumptions based on our knowledge and experience.

Learning outcome

Elicitation

When we begin with just the idea for our product in a group, we need to have creative discussions within the team to consider all the different aspects the product or service will address. Most of our time during the initial release was dedicated to this step. The group strongly believes that this phase is essential because it helps us identify important requirements that can only be discovered through group conversations. We strongly believe that using the approach in later releases with possible users will affect our final requirements a lot, and reduce biases and results in better software for users.

Specification techniques

While working on specifying the requirements, several activities were ongoing. The group made context and use case diagrams to better illustrate what will be in the final product. This has been one way for the group to apply RE practices in a real-world situation, and it also applies to the other activities, such as specifying functional and data requirements.

Group Dynamics

We learned how to work together in a group formally through the use of a team agreement.

We learned to manage in a time constrained environment for release 1, where we were under time pressure due and often were unable to get the entire group together due to the short deadline. This is also due to the group being diverse in both which courses we attend and our personal situations, making our schedules very different.

We have also learned that a diversity of backgrounds has benefits in group work. This has helped our internal elicitation, as we have different perspectives, which allows us to elicit many requirements internally before going to the stakeholders. It also helps in the specification, as different group members have experience in different forms of specification, that gives the group as a whole a larger toolbox of specification tools to work with.

Conclusion

For the first release, we can only conclude that we have defined requirements based on the group's experience and knowledge, which will be changed in the later releases with actually user inputs.