Specifications Report

The requirements specification process occurs in layers, where each outer layer is dependent on its corresponding inner layers. Each layer is a representation of the same product, but on a different scope for a better overall understanding of what is existing and what is to be created. Different types of systems have documentation which will be used in parallel with each other, starting with the BRS, StRS, and SyRS and including the software/ hardware specifications.

BRS – Business Requirements Specification: The BRS is about the business itself and its motivation for why it wants to develop some new system. This describes what would be changed, the processes and policies under the new system. The document specifies from stakeholder's perspectives different requirements and their needs in context of their relation to the system. The stakeholders will be participating in this information gathering process and a representative can view it to ensure its accuracy, editing the contents where necessary. This will cover things such as the business structure and processes, different rules, policies and constraints, as well as the life-cycle concept of the system.

StRS – Stakeholder Requirements Specification: The StRS is a detailed, specific portion of the BRS which describes the stakeholders' perspective on the needs of the users and each person involved in the systems use. This servers as a basis of their participation in the requirements process. These requirements will include the organizational, business, and user requirements. The general audience for this will be the same at the BRS, which is for a representative to view from the stakeholder's perspective and verify its accuracy. The developers will use this throughout the entire requirements process when developing the corresponding elements of the system.

SyRS – System Requirements Specification: The SyRS will start to touch on the technical requirements describing the involvement of human-system interactions. As a whole, it will describe all inputs, outputs and their relationships. The presentations of this will take many forms which can be best suited for the intended audience throughout the development lifecycle. This can be models, prototypes, or any other paper/digital representation in combination with each other. At the heart of the SyRS is the system requirements, which include the functional, usability, performance, security, information management, policy and regulation, system life cycle sustainment, and interface requirements, as well as the modes and states of the system.

SRS – Software Requirements Specification: The SRS is a specification for a particular software product, program, or set of programs performing functions within their specified environments. The author of the SRS can be one or multiple representatives of the supplier and/or the acquirer. At the heart of the SRS are the functions, performance, usability, interface, and logical database requirements, the design constraints, software system attributes and the supporting information. The overall purpose is to break down the requirements for the developers and the clients so they can verify the requirements which will be used in the development process, describing the overall system.

When creating my BRS and SRS, it was completed in sections (activities) and only some portions of it needed to be created specifically at that moment. This is a good way to go about it as it's more of a methodical checklist than one overwhelming project, similar to how the entire develop process works.

For the BRS, it began by explaining the business purpose. That, for me what describing what TSPA does in general. This came from my overall understanding which I learned during the elicitation process. For each following portion, I personally read the sections to a stakeholder and sent it to the director as well for verification. After the business purpose, I described the scope of the business. This described the divisions which take care of each individual task to accomplish the business purpose. Next, I described the overview, which briefly describes what the daily functions are at TSPA, followed by definitions, which only came out to be the names for course scheduling. From there, I listed and described the major stakeholders, what they need in the system being created, and how they are further divided.

In the next major section, I described the business operational requirements, which is broken down into the following corresponding sections. The business process was described as an informal chart. This described the major stakeholders and the functions associated with them. After that was the business operational policies and rules. This mainly came down to the fact that they are a school and the student information is protected under law, as well as the requirements for graduation to successfully obtain their degree/ certificate.

This process continued for the rest of the BRS and through each step there were either meetings to describe larger process, or specific interview questions that were answered by phone or email. The same process was taken with all processes involved in the SRS. Upon completion of each, they were formatted into a PDF and sent to the director, who shared it with other staff and students. I received a phone call for both, thanking me for interest in their operations, providing minor feedback changes, but otherwise enjoyed the breakdown and some of the visuals provided (especially the eyes for the management in the business processes in the BRS).

Overall, as previously mentioned, the best way to go about creating these large, detailed documents is definitely broken down into these sections, and in our case, activities. When I went to the physical business location itself, they were happy to walk me through the actual client process, and let me talk to some of the students and what they would like to see in a system if it were to be created. It made me want to go through and actually make something they can use, which may be visited later after the semester.