Requirements Document (full SRS)

For your first task this semester, you are to work with your software development team to assemble a software requirements document. This document is to be based on the Pressman template which is available at the following URL:

http://www-personal.umd.umich.edu/~bmaxim/cis4961/reqmspec-uml-r2.docx. Links to an external site.. In addition, you must include a complete set of UML diagrams (date: class diagrams, function: use case, sequence, collaboration/communication, behavior: states, activity) as part of the analysis model in Phase 2. The appendices (for both phase 1 and 2) should be complete (traceability matrix, configuration management plan, metrics, and reference list).

This document will be delivered in two phases. For the first phase (due 6/10/20) your team will need to write up and present the requirements and use cases from this document (sections 1.0, 2.0, 4.1, 4.3, and an appendix containing the traceability matrix and list of references). The complete requirements document will need to be written up and presented on Jul 22nd (after your project plan is complete). Your team will be expected to do a 15 minute presentation (powerpoint with audio or video) of the phase 1 artifacts on 6/10/20. Your presentation will be graded on its: organization, technical content, quality of audio visual aids, and group participation score.

Each team member is to submit evaluations for each team member (0=nothing to 5= lots) including themselves and with a list of what each person contributed. Your participation score will be computed by averaging the individual scores received from your team member participation reports.

Project scope is defined by presenting user visible processing functionality with the major inputs and outputs for each function without regard to implementation detail. Use case diagrams must be accompanied with completed use case templates (see the Pressman and Maxim chapter on scenario –based requirements modeling).

Your documents will also be graded as draft documents, with revisions expected at the end the semester. If your specification document is done properly, your planning documents should flow naturally out of it. If your project scope is not acceptable to the class, you may be asked to find a more worthwhile project to work on this term.

Annotated copy of a requirements document using the old Pressman format can found here:

http://www.mhhe.com/engcs/compsci/pressman/graphics/Pressman5sepa/common/cs1/sw-req.pdf (Links to an external site.)

Assigned: 5/20/20

Phase 1 date due: 6/10/20 Phase 2 date due: 7/22/20

Project Plan and RMMM

For your next task this semester, you are to work with your software development team to assemble a project plan. The basis of your project plan is the Pressman planning document template that may be found at: http://www.rspa.com/docs/Projectplan.html (Links to an external site.). You are also expected to create risk mitigation and monitoring plan based on the Pressman template located at: http://www.rspa.com/docs/riskmmm.html (Links to an external site.). You are expected to use COCOMO and function points as part of your (two or more) cost and time estimates and to reconcile the estimate discrepancies. Your appendix must contain the traceability matrix and list of references.

Your team will be expected to create a 15 minute presentation (powerpoint with audio or video) of these documents during the week of July 1st and upload the documents and video to Canvas. Your presentation will be graded on its: organization, technical content, quality of audiovisual aids, and group participation score. The participation score will be computed by averaging the individual grades (0=nothing, 1 = poor to 5 = great) assigned by all team members (including yourself).

Annotated copy of a project plan and rmmm document can be found here:

http://www.mhhe.com/engcs/compsci/pressman/graphics/Pressman5sepa/common/cs1/projplan.pdf (Links to an external site.)

http://www.mhhe.com/engcs/compsci/pressman/graphics/Pressman5sepa/common/cs1/rmmm.pdf (Links to an external site.)

http://www.mhhe.com/engcs/compsci/pressman/graphics/Pressman5sepa/common/cs1/projsch1.pdf (Links to an external site.)

Assigned: 6/10/20 Date due: 7/01/20

Use Case Document

For your first task this semester, you are to work with your software development team to assemble a software requirements document. This document is to be based on the Pressman template which is available at the following URL:

http://www-personal.umd.umich.edu/~bmaxim/cis4961/reqmspec-uml-r2.docx. Links to an external site.. In addition, you must include a complete set of UML diagrams (date: class diagrams, function: use case, sequence, collaboration/communication, behavior: states, activity) as part of the analysis model in Phase 2. The appendices (for both phase 1 and 2) should be complete (traceability matrix, configuration management plan, metrics, and reference list).

This document will be delivered in two phases. For the first phase (due 6/10/20) your team will need to write up and present the requirements and use cases from this document (sections 1.0, 2.0, 4.1, 4.3, and an appendix containing the traceability matrix and list of references). The complete requirements document will need to be written up and presented on Jul 22nd (after your project plan is complete). Your team will be expected to do a 15 minute presentation (powerpoint with audio or video) of the phase 1 artifacts on 6/10/20. Your presentation will be graded on its: organization, technical content, quality of audio visual aids, and group participation score.

Each team member is to submit evaluations for each team member (0=nothing to 5= lots) including themselves and with a list of what each person contributed. Your participation score will be computed by averaging the individual scores received from your team member participation reports.

Project scope is defined by presenting user visible processing functionality with the major inputs and outputs for each function without regard to implementation detail. Use case diagrams must be accompanied with completed use case templates (see the Pressman and Maxim chapter on scenario –based requirements modeling).

Your documents will also be graded as draft documents, with revisions expected at the end the semester. If your specification document is done properly, your planning documents should flow naturally out of it. If your project scope is not acceptable to the class, you may be asked to find a more worthwhile project to work on this term.

Annotated copy of a requirements document using the old Pressman format can found here:

http://www.mhhe.com/engcs/compsci/pressman/graphics/Pressman5sepa/common/cs1/sw-req.pdf (Links to an external site.)

Assigned: 5/20/20

Phase 1 date due: 6/10/20 Phase 2 date due: 7/22/20

Team Post Mortem and Prototype

Each member of your team is required to create an individual postmortem report using this form individual postmortem specification. Links to an external site. template found on my web site http://www-personal.umd.umich.edu/~bmaxim Links to an external site.. This should be uploaded to Canvas and included on the final disk.

Your team is to create a 10 minute powerpoint presentation (powerpoint with audio or video) which summarizes the team consensus on the post mortems and present it the combined CIS 4951/4961/4971/4981 and CIS 4952/4962/4972/4982 classes during our final exam period on August 19th . This presentaion should be uploaded to Canvas. You will also need to upload a video that demonstrates a feasibility prototype of your project running on August 19th .

I also expect your team to upload one set of time cards reflecting the group consensus quantifying the effort of each team member using this spreadsheet http://www-personal.umd.umich.edu/~bmaxim/cis4961/prototype-time-card.xlsx Links to an external site.

Assigned: 6/21/20 Date due: 8/19/20