**.**

**Concordia University**

**Department of Computer Science**

**and Software Engineering**

**Software Process**

**SOEN 341/4 S --- 2016**

**Project Scope and Plan Document**

|  |  |
| --- | --- |
| **Team members information** | |
| **Name** | **SID** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

***Grading Sheet***

|  |  |  |
| --- | --- | --- |
| ***Section*** | ***Evaluation criteria (see instructions in the template for details)*** | ***Grading*** |
| *all* | *10 marks are allocated for excellence, professionalism and quality of work above and beyond the correct meeting of specifications..* | */10* |
| *1* | *Presentation of this document* | */5* |
| *2* | *Completeness and accuracy with regard to initial project description* | */1* |
| *3.1 .*  *.*  *3.2*  *3.3* | *Completeness and accuracy of the project functional requirements expressed as formal use cases, including difficulty and importance indicators*  *completeness and accuracy of the diagram and description of the domain model*  *completeness and accuracy with regard to initial project description accuracy with regard to initial project description, difficulty and importance ratings* | */15*  *.*  */3 .*  */1* |
| *4.1* | *Description of all team members’ capacities and schedule restrictions* | */1* |
| *5* | *List of goals removed from the project.*  *For each goal removed, give justifications in light of the resources available* | */`1* |
| *6.1 .*  *6.2* | *Clarity of textual description, validity of rationale, clarity and appropriateness of diagram, list of modules responsibilities*  *List of technologies used, validity of rationale* | */2 .*  */1* |
| *7.1 .*  *7.2 .*  *7.3 .*  *7.4*  *7.5*  *7.6* | *Completeness of list of activities, clarity of their stated purpose, as well as statement of what artifacts they are producing*  *Completeness of list of artifacts to be produced during the project, validity of roles description of each artifact*  *Cost estimation of each individual artifact, validity of explanation of cost estimation, total cost estimate*  *Mapping of activities to individual project members*  *Accurate and complete presentation of milestones*  *Assessment of risks `* | */1 .*  */2 .*  */2 .*  */1*  */1*  */1* |
| *8* | *Early Prototyping* | */2* |
| *Total* |  | */50* |

***DO NOT REMOVE THIS PAGE WHEN SUBMITTING YOUR DOCUMENT***

# **Presentation**

*Professionalism of the document in terms of look and feel including, but not limited to layout colour and binding.*

# **Project Description**

*The instructions provided in blue are there to provide you indications describing the expected content of the respective sections. They are all to be deleted and replaced with appropriate content.*

*The introduction of the document provides an overview of the entire document, briefly introducing what are its goals, and what information is to be found in it.*

*Goals and Constraints [A brief description of the purpose and objectives of this project and a brief description of what deliverables the project is expected to deliver. length: 1/2 - 1 page*

# **Goals and Constraints**

*This section aims at describing all the goals of the project in terms of features and qualities to be implemented, as well as constraints imposed on the solution.*

*Note that this section is to present all expected features, which can then later be eventually scoped down in section 5, given the resource limitations exposed in section 4.*

*Discrimination factors such as relative importance and difficulty are to be provided in order to proceed with the scoping..*

## **Functional Requirements**

*This section should describe the requirements that the software shall have. It should define the fundamental actions that must take place in the software in accepting and processing the inputs and in processing and generating the outputs.*

*The overall functional requirements shall be presented graphically as a use case model.*

*Each individual requirement shall be presented as a use case. Also, each requirement should be rated in terms of difficulty and importance in order to provide useful discrimination factors for the project scoping presented in section 5.*

## **Domain Model**

*This is a diagram consisting of domain level objects and their attributes and associations. Include an explanation of the model commenting on each component and its relationship to the other components.*

## **Constraints and Qualities**

*This section describes applicable quality standards and non-functional requirements that the system shall meet, like: performance, usability, reliability, interoperability, scalability, security, etc.*

*Include any design constraints, external constraints or other dependencies, hardware or platform requirements.*

*Constraints and qualities should be described in concrete terms. Where possible, metrics should be applied.*

# **Resource Evaluation**

*This section contains the resource evaluation for the project, expressed both in order to evaluate if resources are sufficient, scoping down if not, and also in order to allocate the resources in the subsequent project plan presented in section 6*

## **Human Resources**

*Present here all your team members in terms of their capacities (strengths, knowledge, experience), as well as an evaluation of the time they can consecrate to the project over the semester, and possible lack of availability during certain periods, which is important information to consider for concrete planning.*

## **Technical Resources**

*Present here the computer resources available for the project. That includes computers, software resources (tools, libraries, etc.) available on these computers*

# **Scoping**

*With regard to the cost/time necessary to meet all the goal presented in section 3, and given the resources available presented in section 4, give here the scope of the solution that you will implement in the project.*

*List all features/goals/qualities that will be left out because of lack of time/resources.*

# **Solution Sketch**

*This section gives an early overview of the solution you propose for the project.*

*This section should include the rationale of your decisions. A rationale exhibits a valid justification for a given decision made in the course of planning your solution. It should explain the reasons why a decision was made. It should justify whether or not this decision is “wise” by comparing it with some others.*

## **Architecture**

*Explain the high-level system architecture that you plan for the project, giving explanations as to why you chose such an approach, e.g. a design rationale. Include a high-level architecture diagram (e,g, a high-level UML class diagram). For each module presented in the architecture, also give its rationale, as well as list their individual responsibilities.*

## **Technologies in Use**

*List all the technologies that you plan to use in the project (e.g. programming languages, tools like compiler or IDE, libraries, etc. Give a brief rationale for the use of each technology, i.e. explanations describing why they are appropriate in the context of this project.*

# **Plan**

*This section contains the schedule for the project, as directed by all the information presented in the preceding sections.*

## **Activities**

*Describe what are the main activities involved in your project. An activity is something that must be undertaken in order to produce an artifact that is useful in reaching the goals of the project. Each activity shall have a clear purpose, and shall yield at least one artifact as an output.*

## **Artifacts**

*Describe what artifacts you are going to produce in this project. Do not limit yourself to “deliverable 1, deliverable 2 and deliverable 3”, but rather split them into lower level units, e.g. “class diagram”, “list of requirements”, “test cases”, etc. Explanations describing the role of each artifact in the production process.*

## **Project Estimates**

*Provide a realistic estimated cost and schedule for the project, as well as the basis for those estimates, and the points and circumstances in the project when re-estimation might occur.*

*Evaluate the cost of production of each artifact, as described in the previous section, and then adding up the numbers.*

## **Activities Assignments**

*Assign the different activities to your team members, according to their capacities and schedule limitations, as presented in section 4.1.*

## **Schedule**

*Diagrams or tables showing target dates for completion of iterations and phases, release points, demos, and other milestones, e.g. a Gantt chart.*

## **Risk**

*List and comment all the elements of the project that present a risk. Explain why they represent a risk.*

# **Prototyping**

*Describe any work undertaken in development of a prototype. A prototype should be developed during this phase both to prove the technologies used are appropriate to the task and to assess the competence of the team to work with the selected technologies.*