CSC3003S Capstone Project — Stage One

Goals (Scope) [21 Marks]

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| Project Abbreviation and Name | ViKER Interface |
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| Date | 26 Jul 2019 |
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| Overall purpose and stakeholders [5] | Apart from the team, the main stakeholder is the client. The purpose of this software is to put into practice the theoretical rules of how to transform an AR model into and ER model and how to transform an ER model into an AR model. The KnowID paper has written down the transformation logic but it is our job to implement the rules in code and develop an easy interface for the user to interact with. The intention of the software must be to show the user that there is an easier way to query data other than writing long SQL queries, therefore this software must be easy to use and require almost no exposure to SQL. |
| SMART Goals [5] | Start by listing the functions and features that will be available to users.  That is, what are all the things a user can do?  Then list all goals: Specific, Measurable, Agreed Upon, Realistic, Trackable |
| Inputs, outputs and performance [5] | The user will construct an ER model and use that as input for the backend to construct and output the AR model. The user will also be able to construct an AR model and use that as input for the backend to construct and output the ER model. This functionality allows the user to go both ways which is essential for testing the software and the implementation of the transformation rules. The theory behind the using this transformation is to be easier than writing long SQL queries not necessarily faster, therefore the primary requirement is that the user |
| Resources and Constraints [3] | Apart from the project team, we need a frontend framework that allows us to display the relational models and allow the elements within the model to be interactive (i.e. can be dragged around and connected to different elements), we will also need to find an open-source library that integrates with our chosen framework in order to add the needed functionality. If we cannot find the needed software, we will be limited to a text-based interface that will take more time to create and severely impact the project timeline. |
| Feasibility [3] | The implementation of a frontend framework to graphically display the relational models is extremely as there are already existing libraries that implement this functionality, therefore saving us a lot of time. The functionality of being able to implement all the transformation rules is not fully feasible as it has never been done before. The client has accepted the fact that not all transformation rules will work and has asked us to create an error log that outputs an en error detailing everytime a transformation rule cannot be applied. |

# Instructions:

1. Replace any text on the right-hand-side column with information about your project.
2. Notice that there is no indication of how the inputs are transformed into outputs. There is no schedule either. That would be too much detail at this stage. We want only the “what”, not the “how” or the “when” just yet.
3. If something is not applicable to your project, state this and explain why and provide some other relevant and appropriate information. Don’t leave any blanks.
4. Submission is on Vula. Remove these instructions from your submission.

# Follow-up

1. Bring this document to your next meeting with your client (or email it to them beforehand) and ask if it adequately represents the project. The “overall purpose” and “goals” sections are most important in this regard.
2. Resolve and note the solutions to any issues you might have about feasibility.
3. If the client is satisfied then please **ask them to sign off on this**. Otherwise arrange a revision and time to meet to sort out the issues.
4. Note that your mark will be determined by your first submission.