STATEMENT OF WORK

[TRACEABILITY TOOL]

Model Inc.
Aishwarya A
Ajay Krishna A
Arul Dhana Saam Prakash A
Aparrnaa R
Dinesh P
Sriram J
Thejesvini R

Customer
SSK Private Limited

MICROSOFT OFFICE USER

Contents

1.1   Purpose

This Statement of Work effective as of **29th September, 2016** is between the Model Inc. team with offices located at SSN Institutions, Kalavakkam, Chennai, TN (the "Team") and SSK Process Systems Services Pt Ltd with offices located at SSN College of Engineering, Kalavakkam, Chennai TN (the "Client"). The agreement provides an understanding of the conditions and limitations of the project. The Client would like the Teams to conduct a project as described in this Agreement. The teams are interested in conducting the project in support of its educational objectives.

1.2   Terms of Agreement

Intending to be legally bound, the Client and Team agree as follows:
1. **Project**: The Team agrees to perform the project described in this Statement of Work unless otherwise noted in future negotiation documents.
2. **Personnel**: The Team comprises of Akkineni Ajay Krishna, Arul Dhana Saam Prakash A, Aishwarya A, Dinesh P, Thejesvini Rachapudi, Sriram S and Aparrnaa Raghuraman. Dr. S. Sivakumar will serve as the Mentor to the teams and the Point of Contact from the client organization.
3. **Term**: The term of this Agreement begins as of the Effective Date and ends on 15th April, 2017 (End Date), unless it is terminated earlier as allowed under this Agreement or unless the parties both agree in writing to extend it (the Term). During this term, the teams shall work for a total of 2428 man hours to complete the project.
4. **Location**: This project shall be developed at School of Advanced Software Engineering, SSN Institutions, Kalavakkam and deployed in SSN Institutions, Kalavakkam.
5. **Ownership of Project Work Product:**
   a. *Intellectual Property Definition.* As used in this Agreement, "**Intellectual Property**" means any and all art, method, process, procedure, invention, idea, design, concept, technique, discovery, improvement or moral right, regardless of patentability, as well as any patents, patent applications, copyrights, trademarks, service marks, trade names, trade secrets, knowhow or other intellectual property rights recognized in any country or jurisdiction in the world.
   b. *Intellectual Property Ownership.* The Client will own any and all work product and/or Intellectual Property developed by the Teams under this Agreement.
6. **Protecting Project Intellectual Property**:
   a. *Definition.* "**Intellectual Property Protections**" means the registration, application, filing, prosecution or maintenance of a patent, copyright, trademark or other protective measure for Intellectual Property.
   b. *Jurisdiction of Protection.* The Teams undertakes the sole responsibility for copyright protection, trademark protection, maintenance of the product during the term of this agreement. After this period, this undertaking shall be transferred to the Client.
7. **Terms of Negotiation**:
   a. The base lining of the functionality shall be discussed at the beginning of every milestone.
   b. Any change in the Statement of Work shall be done only with the consent of the teams, Mentor and the Client.

1.3   Business Context

SSK Process Systems Services Private Limited develops software systems for process industries. Some of the typical products produced by this company consist of unit operation simulators (such as pumps, batch and continuous reactors, absorbers, heat exchangers, distillation columns, etc.), thermodynamic packages (properties calculations, VLE calculations), process engineering calculation packages, flow sheet simulators for utilities plant, etc. This company sells customized versions to various customers and maintains the customized versions of their product.

This company now has nearly 50 customers who are traditional small scale chemical industries and captive power plants. It wishes to capture the customers in bio-tech and pharmaceutical domains. This company has an in-house software development team which uses an iterative lifecycle model for development purposes.

1.4   Goals

Goals: To enable business continuity and growth of SSK Private Limited. These goals can be enabled by providing for the following.

1. Satisfying the client Service Level Agreements (SLA's).
2. Reduce effort involved in maintaining the existing products of SSK Private Limited.

- **Goal subject:** Project Manager of SSK Private Limited
- **Goal object:** SSK Private Limited
- **Environment:** The current technical environment consisting of multiple versions of the same product.
- **Goal measure:**
  By the middle of April 2017, the team will provide a solution that will aid SSK Private Limited in satisfying its service level agreements. Within a month of delivering the solution, the service level agreements that are satisfied by SSK will increase by 25%, by 40% by the end of two months and 100% at the end of three months. The solution provided will enable SSK to identify the right artifacts for a change request to less than a minute.
- **Justification:** On an average SSK private limited receives 50 service request per day. Among these, 40 calls are change request calls from clients. Currently, SSK private limited is able to satisfy only 15 change request calls. SSK private limited is not able to satisfy around 60% of the change request calls because they are spending around 2 hours to 2 days to find the artifacts that will be affected for a particular change request.

1.5   Problems faced

1. Unable to continue developing the product lines as resources are spending time in maintenance which is taking more than the planned effort.
   a. Unable to meet the change requests from the customers on time
   b. Unable to turn around the defects on time
   c. As a result, they are also not able to meet the SLA's with our customers
2. Struggling to identify the impact
   a. Takes a lot of time to identify the affected artifacts
   b. Need to rely on individuals to identify the artifacts
   c. More often wrong version of the artifacts is identified

   d. Build based on the wrong code version goes to the customer
   e. They feel they need to have appropriate engineering tools

1.6 Solution Statement

In order to address the problems faced by SSK, the proposed solution is to develop a model based traceability tool that will restrict access for artifact linkages based on roles and ensure that the right product version is delivered to the customers on time, thereby enabling the company to satisfy the service level agreements with its customers.

1.7 Scope of work

The traceability tool would include the following base line functionalities:

1. The user will have the ability to define a project model using the tool.
2. The user will have the ability to update a project model using the tool.
3. The user will have the ability to manage user roles using the tool.
4. The user will have the ability to manage traceability linkages using the tool.
5. The user will have the ability to view traceability linkages using the tool.
6. The user will have the ability to generate reports based on traceability using the tool.

1.8 Delivery Schedule

Milestones -1	Start Date:	End Date:	Number of cycles
	23-08-2016	26-12-2016	9
Features			
The system shall have the ability to create project model and properties			
The system shall have the ability to add instances pertaining to an element.			
The system shall have the ability to create traceability linkages between instances.			
Artifacts			
Requirements document, Project Plan, Final architecture document, Code, Test plan & Test data, Tracking & Estimation sheet			
Milestones -2	Start Date:	End Date:	Number of cycles
	27-12-2016	06-03-2016	5
Features			
The system shall have the ability to modify project model and properties			
The system shall have the ability to create and assign roles to the project team members.			
The system shall have the ability to modify traceability linkages			

The system shall have the ability to generate reports based on traceability			
Artifacts			
Code, Test plan & Test data, Tracking & Estimation sheet			

Milestones -3	**Start Date:**	**End Date:**	**Number of cycles**
	07-03-2016	03-04-2016	2
Features			
The system shall be deployed and tested for acceptance in the customer environment.			
The system shall be provided with a user manual and deployment manual.			
Artifacts			
Deployment guidelines, User Manual, Final system, Tracking & Estimation sheet			

1.9   Acceptance Criteria

1. All base lined tool functionalities shall be delivered at the end of the project.
2. Demonstrating the delivered tool capabilities by creating a model and viewing traceability for a problem faced by SSK.
3. The agreed upon artifacts shall be delivered at the end of every milestone.
   a. Architecture Diagram
   b. Source code
   c. User manual

1.10 Assumptions

1. The team composition will be 7 members only.
2. Any change in requirements can be added to the project scope only when the project team agrees to it.
3. No new milestones should be expected by the client rather than the one mentioned in the SOW.
4. Stakeholder is available at least once in two weeks for the project team to clarify their doubts regarding their projects.
5. SSK process systems services private limited will allow the project team members to conduct interviews with their employees regarding the project.
6. In case of natural calamity, project team would be allowed to re-scope.
7. We have considered 15% of the estimate to constitute for vacations, holidays and backlogs.

1.10 Disclaimers

ANY AND ALL INFORMATION, MATERIALS, SERVICES, INTELLECTUAL PROPERTY AND OTHER PROPERTY AND RIGHTS GRANTED AND/OR PROVIDED BY THE TEAMS PURSUANT TO THIS AGREEMENT (INCLUDING THE DELIVERABLES), ARE GRANTED AND/OR PROVIDED ON AN "AS IS"

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1.11   Limitation of Liability

THE TEAMS SHALL NOT BE LIABLE TO THE CLIENT OR ANY THIRD PARTY FOR ANY REASON WHATSOVER ARISING OUT OF OR RELATING TO THIS AGREEMENT (INCLUDING ANY BREACH OF THIS AGREEMENT) FOR LOSS OF PROFITS OR FOR INCIDENTAL, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, EVEN IF THE TEAMS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR HAS OR GAINS KNOWLEDGE OF THE EXISTENCE OF SUCH DAMAGES.

1.12   Indemnification

The Client shall defend, indemnify and hold harmless the Teams and their members from and against any and all liability, damage, loss or expense incurred by or imposed upon any or all members of the Teams in connection with any claim, suit, action or demand arising out of or relating to any exercise of any right or license granted or provided to Sponsor under this Agreement, including any use of the Deliverables, under any theory of liability (including without limitation, actions in the form of tort, warranty, or strict liability, or violation of any law, and regardless of whether such action has any factual basis).

INTENDING TO BE LEGALLY BOUND, the parties here to have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date

SSK Process Systems Services P Ltd

(Signature)	
(Name)	
(Title)	
(Date)	

<u>Model Inc. Team Representative</u>

(Signature)	
(Name)	
(Title)	
(Date)	