

## Recapped of Discussion on 23 Feb 2019 (ISY5001) – Version 2

### Machine Reasoning

#### Persons involved:

Chad Ng

Sun Hang

Jin Xing

Dong Bin

Li Xin

Alex (not present)

#### Points Covered

1. We agreed to go with the business case or case study of “DoReMi Books Inc.” We have a total of 13 days to get this project completed.
2. We discussed in detail who should be responsible for what based on group project work.

##### Material :

- a) Lesson 2, file: S-MR Day 2.pdf Slide 57, and,
- b) Workshop guide, file: S-MR Workshop Guide.pdf, page 43 to 46.

The proposed and agreed tasks time line and owners are listed in the Time Line Section of this document.

We have formed two core sub-teams, (1) Alex , Dong bin, and Li Xin. (2) Sun Hang, Jin Xin and Chad

Chad is also functioning as the project team lead. His role will be to facilitate in setting dead lines, task scoping, reasonably recommend who do what based each of individual capabilities and resources. We still discuss as a whole but when a decision cannot be reached, Chad will step in to help make the final call so that we move forward with the project work systematically.

At the same time, Chad would be stepping in to make recommendations on technical or architecture design when it is needed.

3. Dong Bin and Li Xin agreed to work on analysing the business case and start preparing the inference diagram. They discussed this as a sub team and they agreed that they will be able to put up something by this Monday. However, we may have a group web conference call tomorrow, Sunday, 24 Feb 2019 to discuss as a team the inference diagram and also any flow chart or process flows diagrams we can get ready tomorrow.

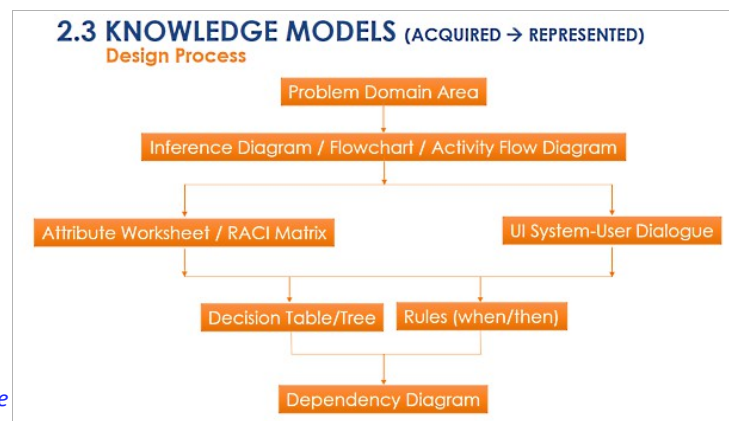
Sun Hang and Jin Xin will be working on the flow chart and activity diagrams. Chad will also chip in by helping to draft an overall process diagram and identify any possible inputs and outputs required by the proposed system as well as any problems that are worth solving (Problem Scoping). This is for tomorrow's call only. Each sub team will still need to work on their parts to deliver their assigned milestone tasks. (See Tasks Time Line section)

4. Chad explained to Jin Xin and Sun Hang the MVC and Web API project templates. Three of us also analysed NRules together and confirmed that it is usable for our project's business case.

Chad showed them the API method calls and how to pass an object in a call from MVC to Web API. Explained how data model would be bound on the UI.

Highlight the importance to make sure the API should be designed as generic as possible and not be too proprietary such that client calling the WEB API would need to write custom codes to use it. The business logic methods should be passed in the object. In this case the passed object should be a messaging object. Sun Hang and Jin Xin need to agree and design the message object to contain the properties or parameters to pass to the Web API.

As for NRules, Jin Xin and Sun Hang checked and confirmed that it can handle firing of rules in a forward chaining manner. (We can implement rules dependency with NRules as a rule may update the fact of an entity object when the rule is true, where by this triggers the firing of a second rule. We also confirm



*that we can use the priority tag in NRules to sequence Rules firing priority if both have the same condition or antecedent)*

5. We agreed to *use the sample HDB BTO project report as a guide* to prepare our project report.
6. Chad highlighted and we agreed that that we need to prepare a simple but clear test plan for the rules we would be implementing based on NRules as it is out of JBoss Drools and we need to make sure we are doing the correct implementation. Chad volunteered to do the rules testing whenever it is ready for testing. Chad also volunteer to prepare the user guide for the final solution.

We can have Alex help with either the user guide or the preparation of the project reporting with Dong Bin and Li Xin.

7. Dong Bin suggested that he would like to also in the project pipe line to prepare a version of the systems implementation on KIE platform just for learning purposes and for all those team members who would like to get a feel of how to use KIE in a real project implementation. Li Xin and Alex may wish to joinly participate in this.

*But, please note that our primary objectives for the next week would be to get the high level inference diagram confirmed and all flow charts, activity diagrams and process flow or workflow diagram completed first.*

8. All of us read through the DoReMe case study. We found that the company is trying to change their systems to be more efficient, DoReMe's digital transformation initiatives underlined the fact that there would be a need to change the way people work and mind sets may need to be changed. So, there is change management issues to be handled. We also need to prepare training plans and adoption plans to make this project a success, (We may need to make some assumptions on the scenario/s)/
9. Dong bin and Jin Xin, after reading the DoReMe's case study, realised that we would probably need to put in place a database system to store the systems of records for the purchase orders, inventory stock data, and customer master data, just to name the key ones. Chad recommended using MYSQL database version 5.6 as it is prior to the big change by Oracle. It is easier to managed.
10. We all agreed that the project video which is 5 mins would be a video that will feature all team members. Chad recommends this because it is a group work and the credit should go to each one of us. Each one of us play an important part. We will work on that parts that we can perform and get the job done. We would not be able to do so alone due to the time line and resource constraint.

**Two options:**

- a) Each sub team may prepare one video each and Chad can combined the 2 videos into 1 final video. Each video may feature 2 persons, but each person takes time to talk each.
- b) Each sub team member prepares a video of 1 minutes each for their parts and Chad will combined them into one.

*Please bare in mind that you may record the video once you have completed your parts. You don't have to do the video towards the end of the time line. It's like a time-sequenced video record of the whole project progress to completion.*

## Project Tasks - Time Line

Nr .	Task Name / Description	Owners	R/A/C/I	Start Date	End Date	Status
1	<b>Prepare Inference Diagram, Initial Flow chart and process flows</b>	Dong Bin, Li Xin	R, A	24 Feb 2019 (Sun)	25 Feb 2019 (Mon)	OK
	<b>Brainstorm and changes</b> (Web conference call)	All other members	C	24 Feb 2019 (Sun)	N.A.	OK
	<b>Final Reviews</b>	All other members	C, I	26 Feb 2019 (Tue)	N.A.	

2	<b>Review DoReMe case study and investigate rules that can be applied for our project – NRules</b> Sun Hang may provide some inputs as he is preparing the flow charts.	Jin Xin Sun Hang  Chad All other members	R, A C  C, I I	24 Feb 2019 (Sun)	26 Feb 2019 (Tue)	
	<b>Final Reviews</b> Includes inference diagram, flow charts, activity diagrams and process flow diagrams	All other members	I	27 Feb 2019 (Wed)		

Nr.	Task Name / Description	Owners	R/A/C/I	Start Date	End Date	Status
3	Prepare flow charts and activity diagrams. Prepare process flow diagram.	Sun Hang, Jin Xin  Chad	R, A  R, A	24 Feb 2019 (Sun)	25 Feb 2019 (Mon)	
4	Based on working inference diagram, flow charts and process flows. <b>Prepare MVC web site (Prototype)</b> <i>Draft prototyping</i>	Sun Hang	R, A	25 Feb 2019 (Mon)	27 Feb 2019 (Wed)	
5	Based on working inference diagram, flow charts and process flows. <b>Prepare web API (Prototype)</b> <i>Draft prototyping</i>	Jin Xin	R, A	25 Feb 2019 (Mon)	27 Feb 2019 (Wed)	
6	Prepare Attributes week sheet	Sun Hang Jin Xin Chad (Tasks may be shared)	R, A R, A C, I	25 Feb 2019 (Mon)	28 Feb 2019 (Thur)	
7	Test Plan Preparation	Chad Sung Hang, Jin Xin	R, A C, I	26 Feb 2019 (Mon)	28 Feb 2019 (Thur)	
8	<b>Final Prototype Reviews</b> All team members may review web site and review	All other members	I	28 Feb 2019 (Thur)		

Nr .	Task Name / Description	Owners	R/A/C/I	Start Date	End Date	Status
9	Conduct testing of MVC web and web API based on test plans	Chad Sung Hang Jin Xin	R, A	1 Mar 2019 (Fri)	N.A.	
10	<b>On site Meet up</b> Venue to be confirmed. - to recap all work completed so far - review any outstanding and any back logs - plan and re-schedule any incomplete tasks	Dong Bin, Li Xin, Chad, Sun Hang, Jin Xin	R, A	2 Mar 2019 (Sat)	3 Mar 2019 (Sun) <i>(To be confirmed)</i>	

Nr	Task Name / Description	Owners	R/A/C/I	Start Date	End Date	Status
11	<p>Prepare project report document outline - start a draft copy based on BTO project sample - include all diagrams, charts. Eg. inference diagram, flow charts, activity digram, process flow diagrams. Etc. These will be collected and updated over time.</p> <p><b>Important Note:</b> Jin Xin and Sun Hang will consult and provide feedback and observations for improvements.</p> <p>Chad will be responsible to consult and advise on the overall reporting. Chad will review at high level.</p> <p>However, all must agree to the final draft report before we confirmed it to be ready for submission.</p>	<p>Dong Bin, Li Xin</p> <p>Chad</p> <p>Sun Hang, Jin Xin</p>	<p><b>R</b></p> <p><b>C, A</b></p> <p><b>C, I</b></p>	26 Feb 2019 (Tue)	6 Mar 2019 (Wed)	
12	Prepare use case scenarios documentation required by project report in item 11	<p>Sung Hang, Jin Xin</p> <p>Chad</p>	<p><b>R, A</b></p> <p><b>C, I</b></p>	2 Mar 2019 ( <b>Sat</b> )	6 Mar 2019 (Wed)	
13	<p>Prepare user guide</p> <p>Prepare training plans to improve adoption and ease change resistance</p>	<p>Chad</p> <p>All other members</p>	<p><b>R, A</b></p> <p><b>C, I</b></p>	2 Mar 2019 ( <b>Sat</b> )	6 Mar 2019 (Wed)	
14	Prepare video take	All members	<b>R, A</b>	2 Mar 2019 ( <b>Sat</b> )	5 Mar 2019 (Tue)	
15	Final Review of all completed items in project work	All members	<b>R</b>	7 Mar 2019 (Thu)	N.A.	
16	<p>Upload project into New ISS NUS project submission portal and also to Git Hub</p> <p>All other team members should log into project site to confirm that Chad has uploaded correctly.</p> <p>Any changes may be made by 9 Mar.</p>	<p>Chad</p> <p>All other members</p>	<p><b>R, A</b></p> <p><b>I</b></p>	8 Mar 2019 (Fri)	9 Mar 2019 (Fri)	