# Ontology-based Expert System for a Generic Drug Production of Pharmaceutical Dosage Forms

## The summary of Suggestion/Question

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| No | Question and Suggestion | Answer |
| 1 | Software development process? | We use spiral model, because the advantage of spiral model is support documentation control and high risk of the program. The spiral model appropriate with The ontology base expert system for generic drug production of pharmaceutical dosage form because, In this project there are some risk that make program working error such as the ontology of pharmaceutical is not correct or reformation working wrong. And the document of this project must control by person because, In each progress submission we will send the document about project development progress report. |
| 2 | How much domain knowledge would be needed to build and evaluate the system? | The domain knowledge of this project is pharmaceutical ontology about original drug reformulation as generic version so, domain knowledge not include a drug manual or how to do the ingredient. |
| 3 | Why on Tablet computer? | We use Tablet computer, because the pharmacists can use the ontology base expert system for generic drug production of pharmaceutical dosage form anywhere. They can use in lab or working place. |
| 4 | What is server (System Architecture) | Server is Apache Tomcat. |
| 5 | Who is your client or customer and how do you provide the service? | The client is expert pharmacists at CMU. They can put the new pharmaceutical information to system. |
| 6 | What is Inference system? | An Inference Engine is a tool from Artificial Intelligence. The first inference engines were components of expert systems. The typical expert system consisted of a knowledge base and an inference engine. The inference engine applied logical rules to the knowledge base and deduced new knowledge. This process would iterate as each new fact in the knowledge base could trigger additional rules in the inference engine. Inference engines work primarily in one of two modes: forward chaining and backward chaining. Forward chaining starts with the known facts and asserts new facts. Backward chaining starts with goals, and works backward to determine what facts must be asserted so that the goals can be achieved. |
| 7 | In hybrid, how to combine the rule base system and case base reasoning system? | We use the case base reasoning for comparing between new cases and existing case in a database. If the new case is good for using in the real drug reformulation, the system will use the rule base system for making the new case to be appropriate with drug reformation. Therefore the hybrid system can reduce the statement of working. |
| 8 | Why use MongoDB? | We use MongoDB, because we can manage pharmaceutical data easier. The pharmaceutical data have many relation between the values inside, For example manufacturing A with ingredient B. If we use the relational database, we must to mapping the data together so, it make us lose time and hard to managing. |
| 9 | How to verify that the project is finish? | The system is satisfied by the pharmacy stake holder. |