# Abstract

In the publish/subscribe paradigm nowadays, the information providers disseminate publications to those consumers who have expressed interest by registering subscriptions. Matching efficiency and expressiveness are two key design goals of publish/subscribe systems. In this project, we have expanded the publish/subscribe system in various algorithms that send events to the owners of subscriptions satisfied by those events. The purpose of this project is that it must be able to communicate with third party systems, the event generator and the subscriber, in a modular manner. Central to the module will be a database table that records the events. Associated with the event will be a list of subscribers interested in the event. The challenging part of our scope is the event generating system comes in various forms that have to be provided data via socket, XML file, embedded API call and database tables. The methodologies that we have used mainly are research from internet and did literature review about the topic that related to research questions and come out a framework and prototyping. However, our level of achievement for this project is uncompleted. The reason is because the weakness of our project was lack of resources and tool supported. Oppositely our strength of our developed system is successfully informed the subscribers via a cell phone through SMS and sent to another system via socket in an efficient way. On the whole, all existing publish/subscribe systems cannot capture uncertainty inherent to the information in either subscriptions or publications. Therefore, the main contribution of our work is that it greatly improves the expressiveness of the publish/subscribe system without the sacrifice of matching efficiency. Last but not least, our suggestion is the module has to be able to cater for future needs without the need to change a lot of code.