# **SE 110: Software Engineering**

### Spring 2013

## **Project Proposal**

17<sup>th</sup> February, 2013

Project title: Reactive Data System (Event Driven Architecture)

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#### Team Members:

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#### Abstract:

In this project we are trying to build an application which is highly reactive to data modification in RDBMS. For this we need to develop a Event Driven Framework which will consist of mainly three components Event, Dispatcher and Action. User will define events and respective action. Dispatcher will run as a daemon process and check for events continuously if any event occurs then respective action is performed.

It has many applications in scenario where system has to perform action asynchronously depending on incoming data or time based events. Some of example would be setting minimum threshold value of shares to purchase automatically.

Our EDA will be generic framework which can be used by almost any event driven application. For demonstrating our RDS we've selected *admission process* as our domain.

### Role:

- 1. EDA -Event Module
  - Event can be of two types namely Database based and Time based event.
  - Event module will create, register events in Event Repository.
- 2. Database
  - Design schema for Event and Event Type repository.
  - Implementation of Referential Integrity
  - Implementation of Transaction Management.
  - Indexing of Database.
  - Event related data is kept in event repository to which Listener keeps checking for event to occur.
- 3. User Interface
  - Interface to select type of event and register Events and to select Action.

- Admin Dashboard
- Applicant Interface(Interface for applicant to register, add GATE score etc)

Faculty Supervisor: Prof. Chandrashekar Ramanathan

**Signature of Faculty Supervisor**