*Team: 05* 

# **SOFTWARE DESIGN TOOLS:**

# **RATIONAL ROSE:**

- Modeling System
- Creating the UML diagram like Class Diagram and Sequence Diagram

#### **MICROSOFT VISIO:**

• Drawing Diagram like ERD and Database Schema

# PHOTOSHOP:

- Creating UI Mockups
- Use for wire-framing and Prototyping the GUI.
- A mockup is a prototype, it provides at least part of the functionality of a system and enables testing of a design

# **DIAGRAM:**

We are going to create UML diagrams for project CampusTalk, following is the list for the same.

#### **USE CASE MODEL:**

- A use case diagram in the Unified Modeling Language (UML) is a type behavioral diagram. Its purpose is to be present a graphical overview of the functionality provided by a system in terms of actors, their goals (represented as use case), and any dependencies between those use cases.
- The main purpose of a use case diagram is to show what system functions are performed for which actor. Roles of the actors in the system can be depicted. Show user functionality in the system.

• This model helps us to understand the system as per user perspective, and also provides answer to the question "What the users can do using the system?"

# **CLASS DIAGRAM:**

- Each usage scenario implies a set of "objects" that are manipulated as an actor interacts
- With the system; these objects are categorized into classes, a collection of things
  that have similar attributes and common behavior. Analysis modeling elements
  depicts the manner in which classes collaborate with one another and the
  relationship and the interaction between classes.
- This diagram helps us at implementation phase to structure the system as object oriented manner i.e. in terms on classes and objects.

# **SEQUENCE DIAGRAM:**

- It is behavioral representation in UML diagram, indicates how events cause transitions from object to object. Once events have been identified by examining a use-case, the modeler creates a sequence diagram-a representation of how events cause how from one object to another as a function of time. It is a shorthand version of the use-case. It represents key classes and the events that cause behavior to flow from class to class.
- This model helps us to understand transition between the objects, which will helps us later in development stage to maintain flow between various objects i.e. message passing between objects (oops concept). Provides way to represent the system in object oriented way.

# **ERD** (Entity Relationship Diagram):

- Use to depict the Entity and their relationship within system.
- Entity-relationship diagrams were first proposed as a means of quickly obtaining, with minimum effort, a good sense of the structure of a database.

• This diagram helps us in later stage at time of designing actual physical Database Design. They are used to plan and design a database and to model a system's data.

# Tentative Plan for Software Design Diagram:

Start on: 6-Sep-12 End on: 19-Sep-12

| Diagram              | Team Member                  |
|----------------------|------------------------------|
|                      |                              |
| Use Case Model       | Shreeji, Hiral               |
| Use Case Description | Ravi, Sunny, Darshil, Piyush |
| ERD                  | Faishal                      |
| Sequence Diagram     | Kushal                       |
| Class Diagram        | Aresha                       |
| Review               | All Member                   |