

## **(1) Object Classes design :**

### **1.1 General Description :**

The conference management system will be built of several classes and objects. These classes are Conference class, Paper class, Review class and A User interface that will be implemented by Program Chair class, Area Chair class, Author class and Reviwer class.

### **1.2 User Interface :**

The user interface will be implemented by four classes which are Program Chair class, Area Chair class, Author class and Reviwer class.

```
import java.util.*;

public interface User {

    String userID;
    String emailAddress;
    String password;
    String name;

    /**
     * method for the user to login to the conference on
     * an existing account
     * @param email the users registered email address
     * @param password the users chosen password
     */
    public void Login(String email, String password);

    /**
     * method for user to logout of the conference tool
     * @param userID unique id number of the user to
     * logout
     */
    public void Logout(String userID);
}
```

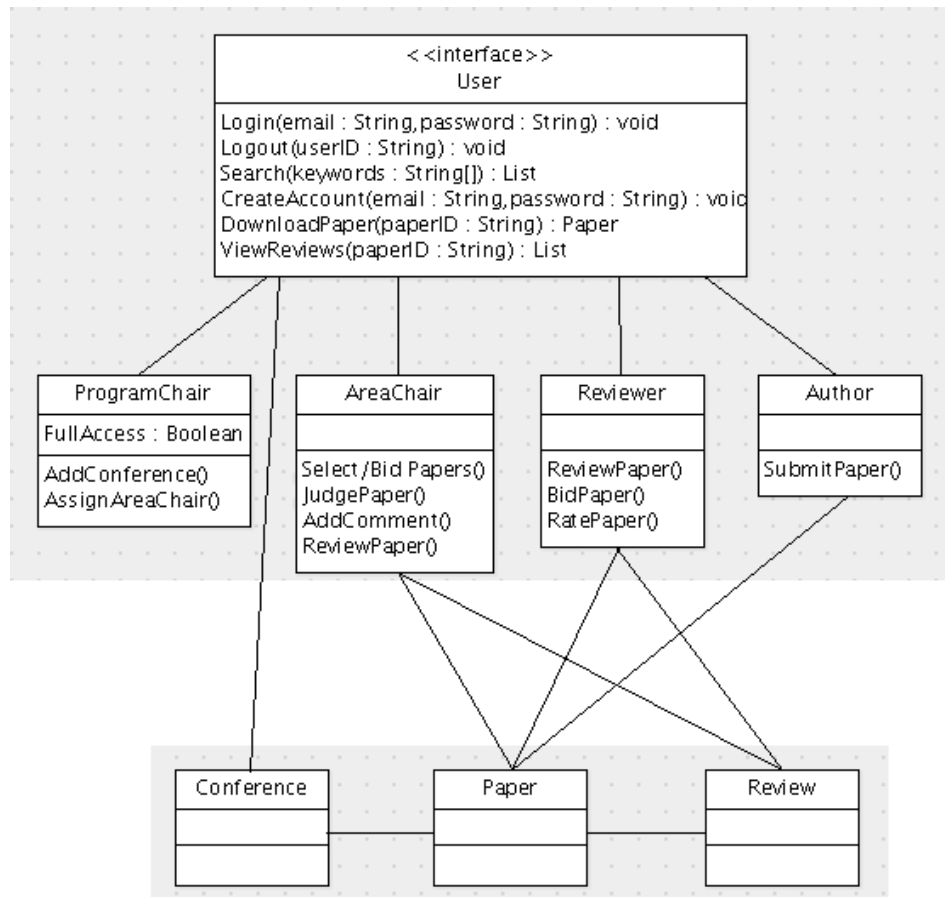
```
/**
 * method to search for papers in the conference
 * @param keywords array of strings describing
 * topics in the conference
 * @return array of papers with matching keywords
 */
public List<Paper> Search(String[] keywords);

/**
 * method for the user to create an account for the
 * conference
 * @param email the users email address they use to
 * sign in
 * @param password users chosen password to login
 * with
 */
public void CreateAccount(String email, String
                           password);

/**
 * method for user to get a submitted paper from the
 * conference
 * @param paperID id number unique to the paper
 * @return the paper object
 */
public Paper DownloadPaper(String paperID);

/**
 * method to access reviews from a paper on the
 * conference
 * @param paperID id number of the paper wanting to
 * view
 * @return list of reviews submitted for that paper
 */
public List<Review> ViewReviews(String paperID);
}
```

### 1.3 UML diagram for the classes :



**UML diagram**

The UML diagram shows Roughly the relationships between the classes. Also it shows some of the functions that will be implemented in some of the classes.

## **(2) Database design :**

### **2.1 General description :**

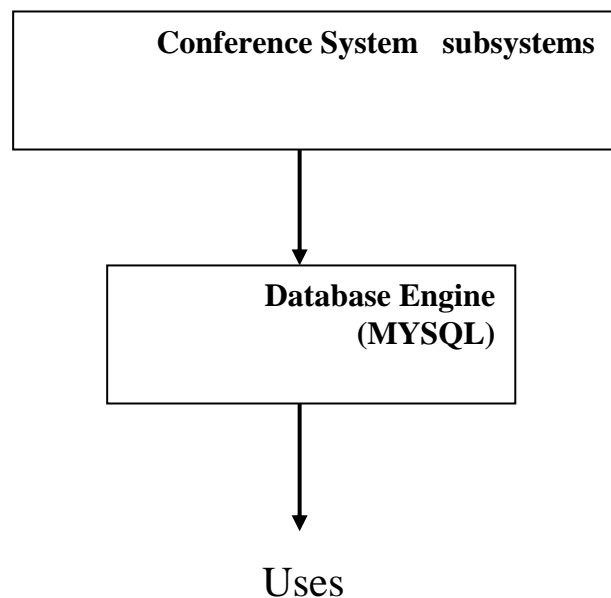
The following documents outline the entities that the database engine will use and main key attributes of each entity. The diagram shows the general relationship between entities. We just illustrate the primary key and foreign keys and well will later in the design stage indicate all attributes parameters and their types.

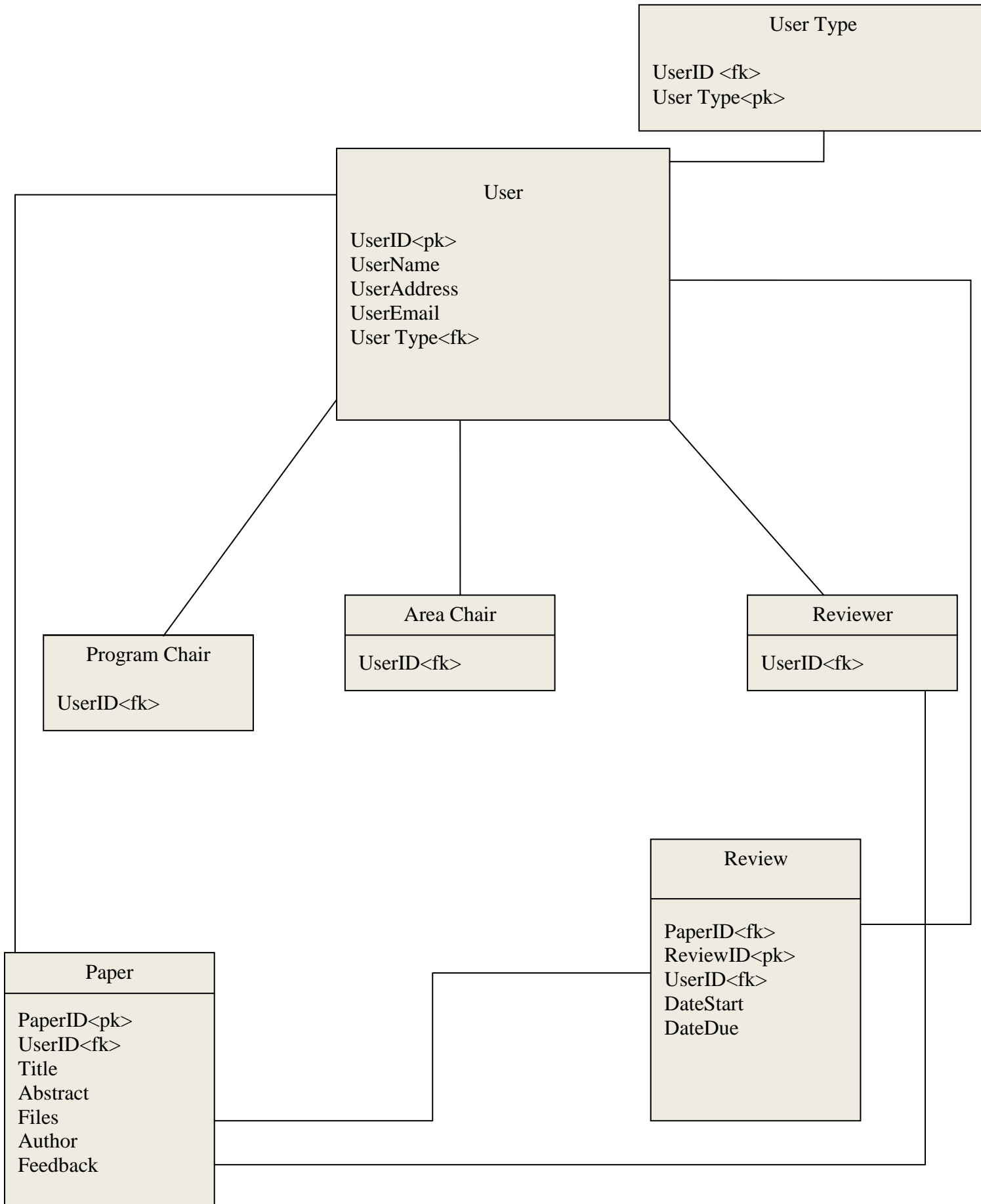
### **2.2 Database contents:**

**Our database is supposed to include:**

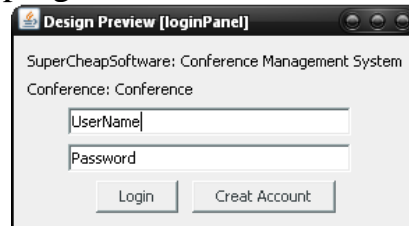
- The conference details.
- All users and any user account can be retrieved from the database.
- Submitted, searching, and downloading papers.
- Paper Review.

### **2.3 Data Model for database:**



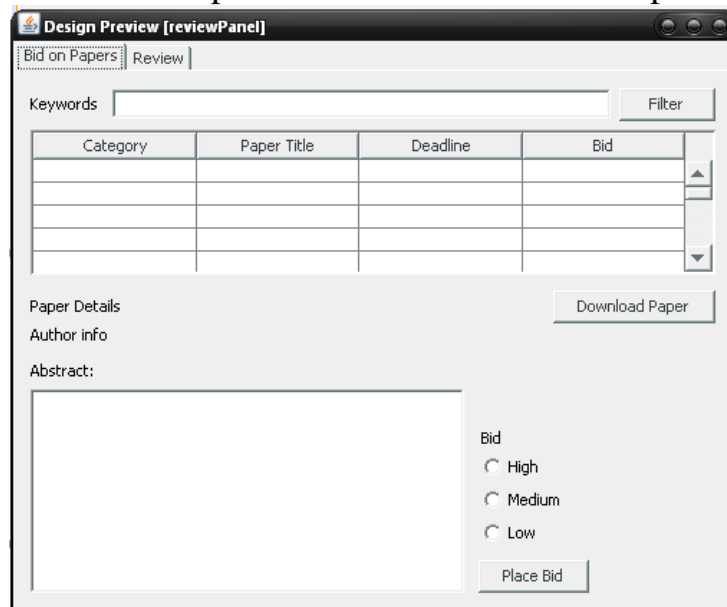


The login's panel is very basic, only username and password are input. The user will be automatically redirected to the correct form; author, reviewer, area chair or program chair.



The panel also allows new users to create an account in order to use the conference management system.

Below is a primitive example of a tab of the reviewer's panel.



Papers would be updated in real time or at the click of a "refresh" button. User will be able to enter keywords to filter the papers visible to show papers of his/her interest.