CHAPTER 6: CLASS BASED MODELING OF DUCMS

This Chapter is intended to describe class based modeling of Dhaka University Club Management System.

6.1 CLASS BASED MODELING CONCEPT

Class-based modeling represents the objects that the system will manipulate, the operations that will applied to the objects, relationships between the objects and the collaborations that occur between the classes that are defined.  
6.2 General Classifications

To identify the potential classes we have first selected the nouns from the solution space of the story. These were then characterized in seven general classifications. The seven general characteristics are as follows: 1. External entities

2. Things

3. Events

4. Roles

5. Organizational units

6. Places

7. Structures

Following are the specifications of the nouns according to the general classifications:

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Table : General Classifications of Nouns

6.3 Selection Criteria  
The potential classes were then selected as classes by six Selection Criteria. A potential class becomes a class when it fulfills all six characteristics.  
1. Retained Information  
2. Needed Services  
3. Multiple Attributes  
4. Common attributes  
5. Common operations  
6. Essential requirements

Table 14: Selection Criteria of Potential Classes

6.4 Associate Noun and Verb Identification  
We now identify the nouns and verbs associated with the potential classes to better find out the attributes and methods of each class.  
  
  
 Table 15: Associate Noun and Verb Identification

6.5 Attribute Selection  
After identifying the classes, we have specified their attributes and methods.

Table 16: Attribute Selection of Classes

6.6 Method Identification  
 Table 17: Methods of Classes

6.7 Finalizing Classes  
To identify the final classes we need to check if there can be any hierarchies or merges. These  
identifications are given below: