Mawlana Bhashani Science and Technology University



Department of Information and Communication Technology

Course Code : ICT-3210

Course Name : Software Engineering Lab

Name of the Lab : Class Diagram of the project

Lab No. : 04

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<u>Class Diagram:</u> Class diagram is a static diagram. It represents the static view of an application. Class diagram is not only used for visualizing, describing, and documenting different aspects of a system but also for constructing executable code of the software application.

Class diagram describes the attributes and operations of a class and also the constraints imposed on the system. The class diagrams are widely used in the modeling of object oriented systems because they are the only UML diagrams, which can be mapped directly with object-oriented languages.

Class diagram shows a collection of classes, interfaces, associations, collaborations, and constraints. It is also known as a structural diagram.

Purpose of Class Diagrams:

The purpose of class diagram is to model the static view of an application. Class diagrams are the only diagrams which can be directly mapped with object-oriented languages and thus widely used at the time of construction.

UML diagrams like activity diagram, sequence diagram can only give the sequence flow of the application, however class diagram is a bit different. It is the most popular UML diagram in the coder community.

The purpose of the class diagram can be summarized as –

- Analysis and design of the static view of an application.
- Describe responsibilities of a system.
- Base for component and deployment diagrams.
- Forward and reverse engineering.

The Class diagram of "Online Credit Fee Payment System"

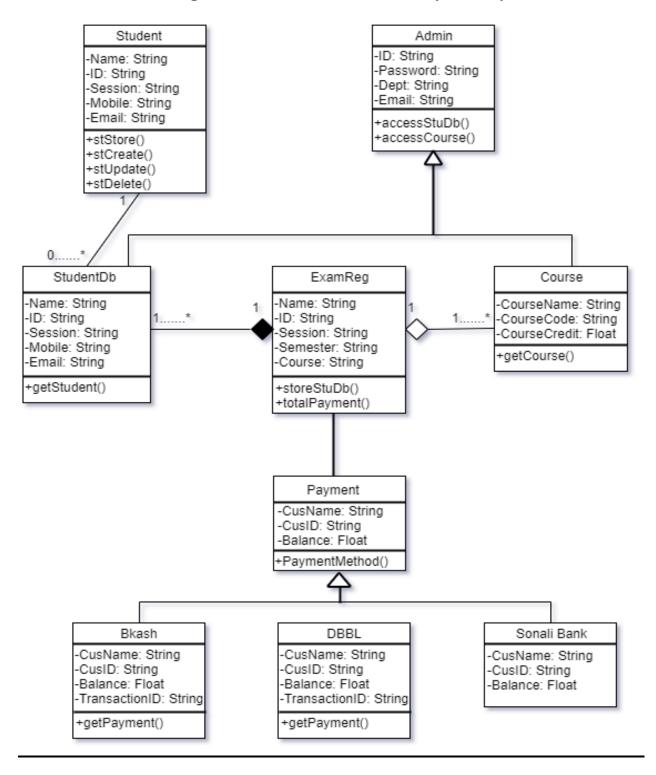


Fig. Class Diagram.

<u>Conclusion:</u> From this lab I come to learn that the class diagram. Class diagram is a static diagram and it is used to model the static view of our project. The static view describes the vocabulary of our project. Class diagram is also considered as the foundation for component and deployment diagrams. Class diagrams are not only used to visualize the static view of the

system but they are also used to construct the executable code for forward and reverse engineering of any system.