## **Functionalities Description**

The following eight analyses can be requested and viewed by the users using the system built by the development team:

- 1. Classroom requirement summary based on class size, total slots per day, and course sections offered:
  - For a given range of class size (class size = number of students enrolled in a section), a given number of courses offered (counted in terms of sections) in a semester, how many classrooms would be needed if each day's schedule was divided into six slots? Seven slots?
  - Generate pie-charts showing percentage distribution of the class rooms per class size range.
- 2. Comparison of number sections offered across schools for a selection of class sizes w.r.t each other as well as the total number of sections throughout the entire university in a given semester.
- 3. Resource usage summary from a comparison of average enrollment per course and average capacity per room.
- 4. Available resources summary based on capacity of all the different categories of rooms in the university and the number of such rooms with a given capacity to hold a number of students.
- 5. Comparative analysis of number of classrooms available per classroom size (i.e. capacity to hold a number of students) and number of rooms that are actually required.
- 6. Breakdown of the number of courses (sections) offered in each school w.r.t. number of students enrolled in them, starting from 1 and going up to the largest number of students enrolled, with an increment of 1.
- 7. Comparative analysis of the revenue generated by each school each semester as well as the percentage change in the overall total revenue of the university each semester.
- 8. Comparative analysis of the revenue generated by each department in SETS, also w.r.t. that of the school each semester and the percentage change in the revenues of each department as well as the overall total revenue of the school.