

# IE-3081-Homework3

## Student information

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We have selected the modern shared office system for our simulation project.

## System Component

**System:** Office Building

**Entities:** People (who want to study in this area), Officer

**Attributes:** Study rooms

**Activities:** Study, work or meeting

**Events:** Getting ticket from ticket machine, studying in the room, paying the officer when leaving, leaving at building

**State Variables:** Number of study rooms, number of people who want to use the room at the queue, number of people looking for an empty room, number of occupied and empty rooms.

## Relations Between System Components

Our system is a modern study room. The people will come to this building with their friends and try to find an empty room to study, work or meeting. There is a ticket machine at the entrance of the building where people will get their tickets while entering building. When they are leaving there is an officer which will get the money from the people based on their stay in the room.