Chapter 8 Behavioral Model

8.1 Introduction

Behavior modeling is also referred to as State modeling, State machines and State transition matrix. Behavior modeling is when one thinks of his ideas in terms of states and transitions. This requires both identifying all of the interesting states of being that software or its components are likely to be in. And also, at a high level abstracting what events are likely to cause software or its components to change between states of being.

8.2 Identifying Events

Here we have identified events from the Usage Scenario and listed their corresponding initiators & collaborators.

Count	Events	Initiator	Collaborator
1	Registration	User	
2	Login	User	
3	Verification	User	
4	Seat plan generation	User	SeatPlan
5	Setting information	Students, Room	
6	Getting information	Students, Room	SeatPlan
7	Placing Dummy seat	SeatPlan	
8	Randomizing rolls	SeatPlan	
9	Sending email	SeatPlan	

8.3 State Transition Diagram

State Transition Diagram represents active states for each class and the events (triggers) that cau-se changes between these active states. Here we have provided diagram for each of the actors.
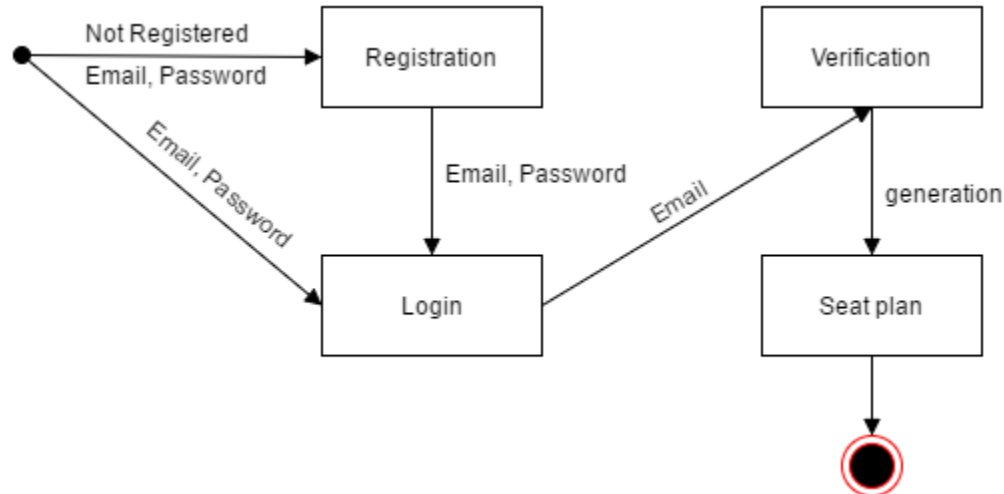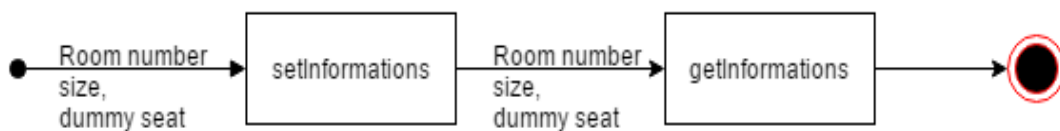

Figure 8.1: State transition diagram of user

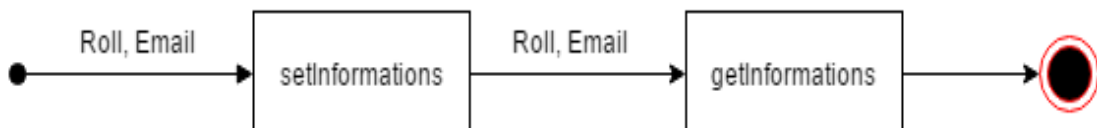Figure 8.2: State transition diagram of Room
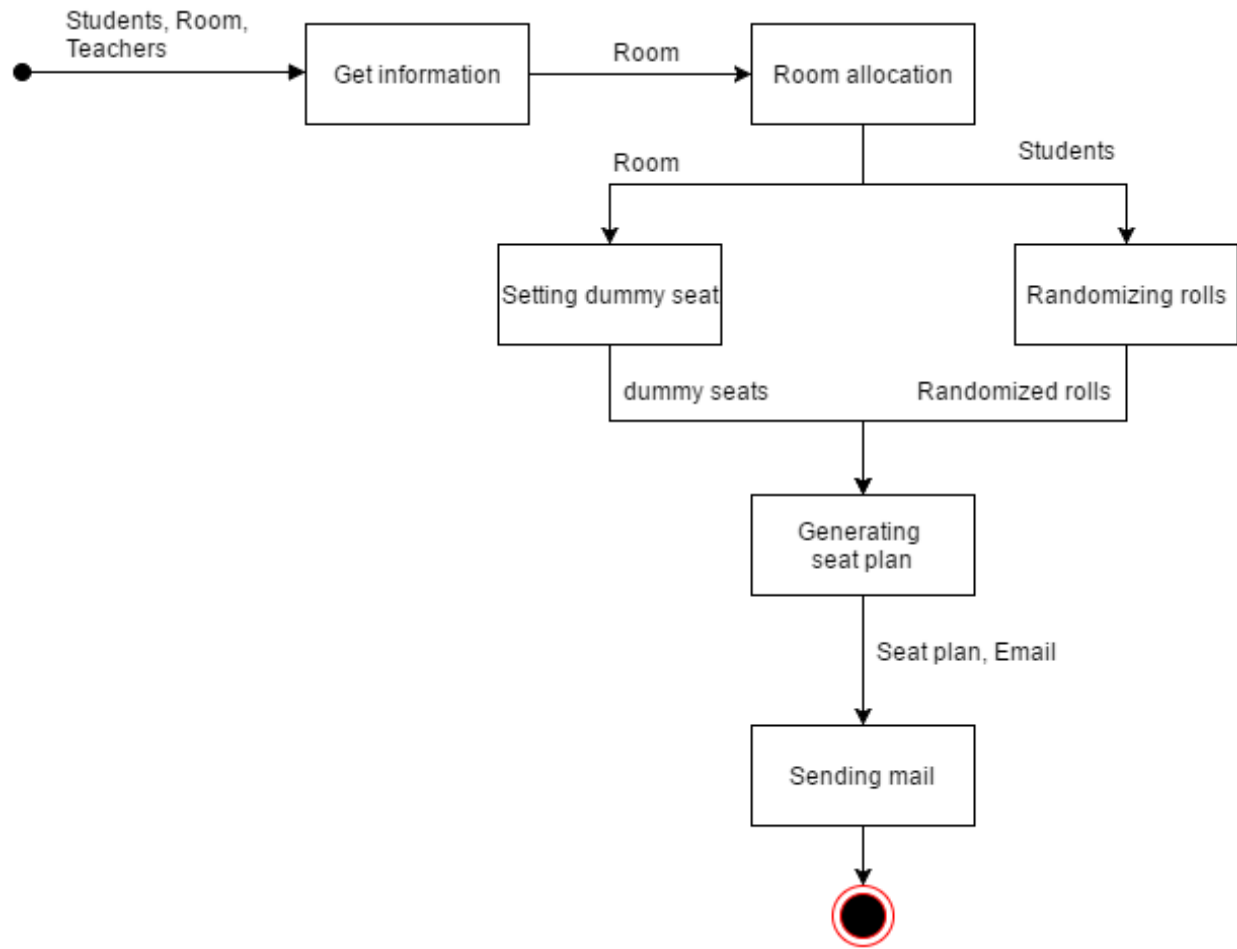

Figure 8.3: State transition diagram of student

Figure 8.4: State transition diagram of SeatPlan

8.4 Sequence Diagram

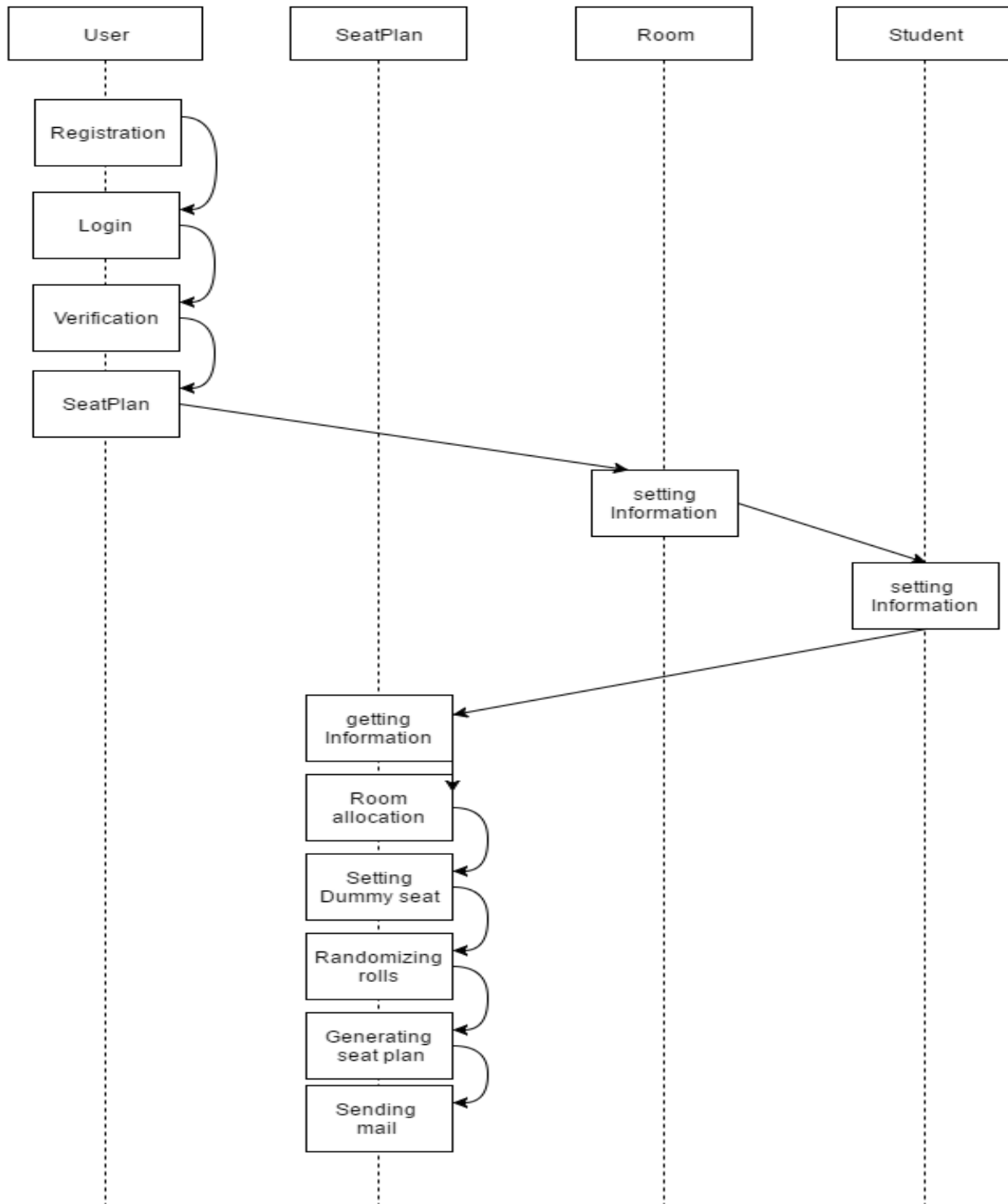Sequence Diagram indicates how events cause transitions from object to object. It is actually a representation of how events cause flow from one object to another as a function of time.

Figure 8.5: Sequence diagram