# Chapter 8

# Behavioral Model

The behavioral model indicates how software will respond to external events.

## 8.1 State Transition Diagram:

State diagram represents active states for each class the events (triggers). For performing this task, we have identified all the events, their initiators and collaborators.

**Event List:**

1. add specific sectors of expense
2. add various field names of expense under each sector with a unique field access key and estimated amount
3. assigns each teacher with a unique username, password, one or many sector names includes one or many field access keys
4. propose an amount of expense corresponding to the assigned fields of the assigned sectors
5. send proposal to the Director for approval.
6. review (accept/reject) the proposal
7. send notification to teacher
8. view annual/special report

**Identifying the initiator and collaborator:**

|  |  |  |
| --- | --- | --- |
| Event No. | Initiator | Collaborators |
|  | Director | Sector List |
|  | Director | Sector |
| Event No. | Initiator | Collaborators |
|  | Director | Teacher, Sector List, Sector |
|  | Teacher | Proposed Sector |
|  | Teacher | Proposed Sector, Director |
|  | Director | Proposed Sector |
|  | Director | Teacher |
|  | Director | - |

**State Transition Diagrams (STD):**

1. **Director:**



#### 8.1.1 Figure: STD for “Director” class

1. **Teacher:**



#### 8.1.2 Figure: STD for “Teacher” class

## 8.2 Sequence Diagram:

Sequence diagram indicates how events cause transitions from object to object.



#### 8.2.1 Figure: Sequence Diagram (Part-1)



#### 8.2.2 Figure: Sequence Diagram (Part-2)