

CyberZone Software Solutions



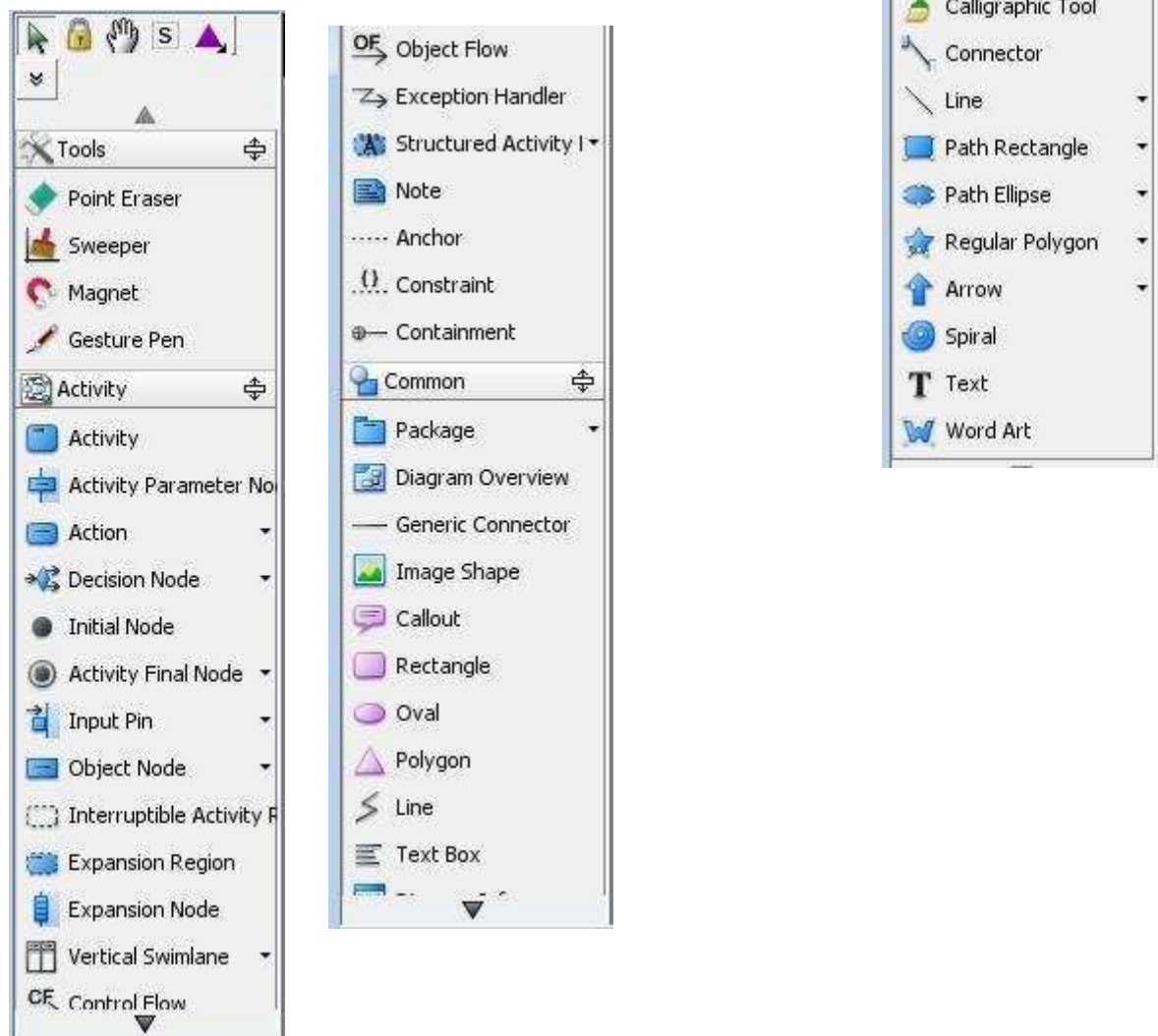
Project: **Software System for Sri Lanka Railway Department**

Practical no.6: Modelling of Behavioural Requirements and Information Flow within a System

Group Members	
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Description of the tool

We used few tools like Violet, Visual Paradigm, Microsoft Visio etc. Finally we realized Visual Paradigm tool is very suitable to design our project. It provides us sufficient functionalities to design our work flows, use case diagrams etc. So we decided to use Visual Paradigm tool further. It provides more diagram tools to design our flows easily and effectively. Below shows the design tools which are available in Visual Paradigm.



So Visual Paradigm contains the many more design tools which do not exist in other softwares. So it is very easy for us to use Visual Paradigm and design our diagrams more clearly. Especially for this practical we need a similar kind of functionalities as in previous cases like use cases and work flows. So ultimately we decided to work with visual paradigm.

List the parts of the system you have identified for behavioural modelling

As in the business model of our project we identified the main sections in our project as follows,

- Customer dealing section
- Train maintenance
- Stations, Tracks, and Operation Controlling

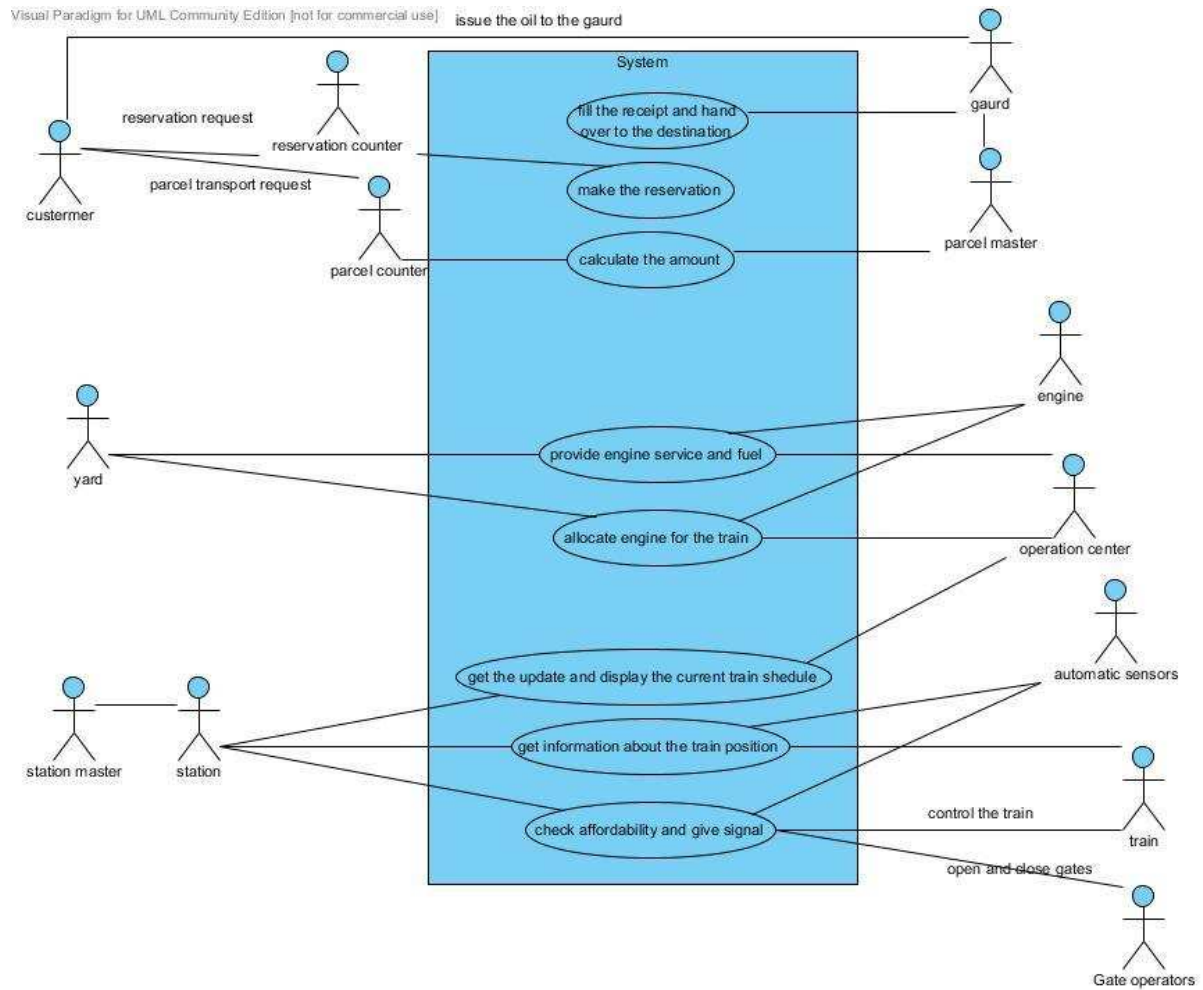
But we have made a small change here that we decided to combine Stations and Tracks section and Operation Controlling section together because ultimately the operation control section provides its service to the stations and tracks section. Because main parts included in operation control section like signaling is nothing other than service provider to train traffic controlling handled in stations and schedule management part is finally providing service to stations.

We separated the customer dealing section because it is pretty much independent from the other sections because in most of the times it only has to handle about financial section. It has to take care of various kinds of deals like seat reservation, parcel transportation etc. In each of these deals they have to check the affordability of that service and calculate the price amounts and do certain things to do there.

Train maintenance section also acts independently from other sections. It has to take care of the records of running conditions of trains and engines and other maintenance things. They have to check the affordability of particular service and act according to that. Meanwhile they have to inform about the required spare parts and other thing while giving the service. They also want to provide an engine or a train according to the requests made by the operation control center.

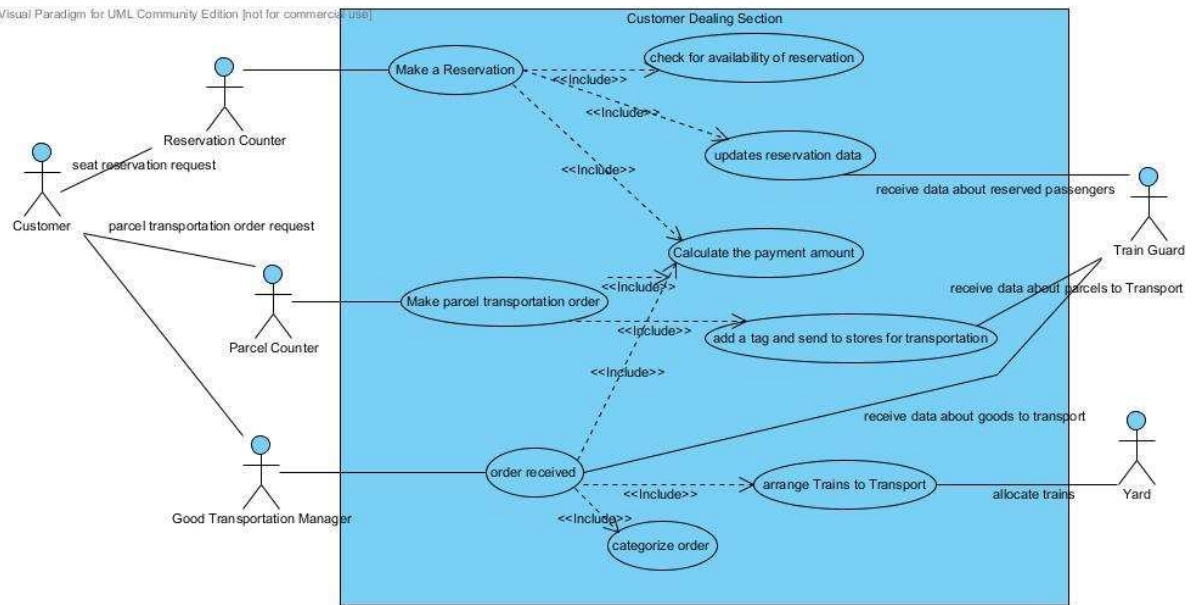
Behavioural Models

Behavioural Model – Overview Level

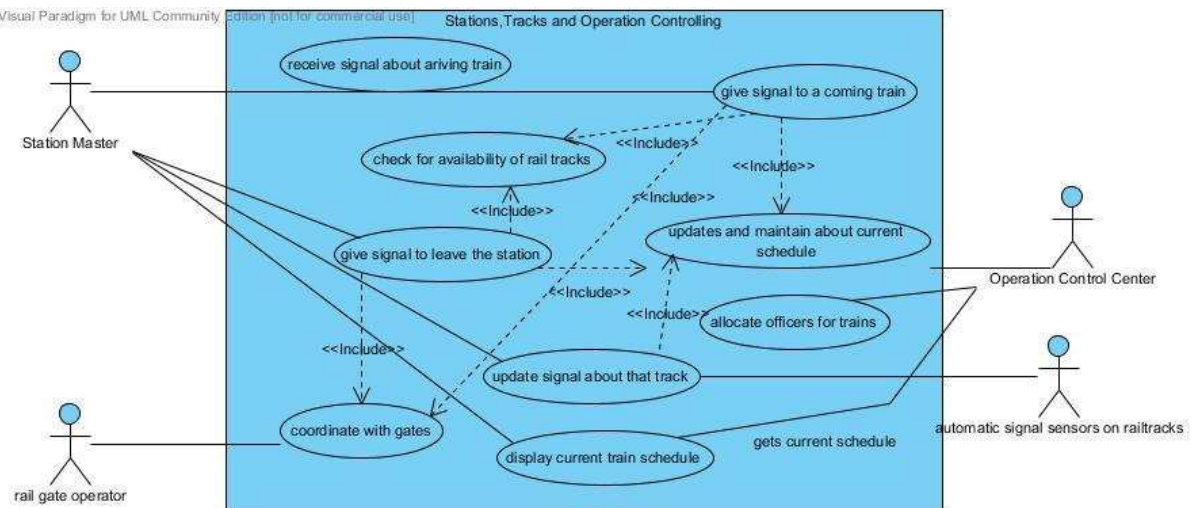


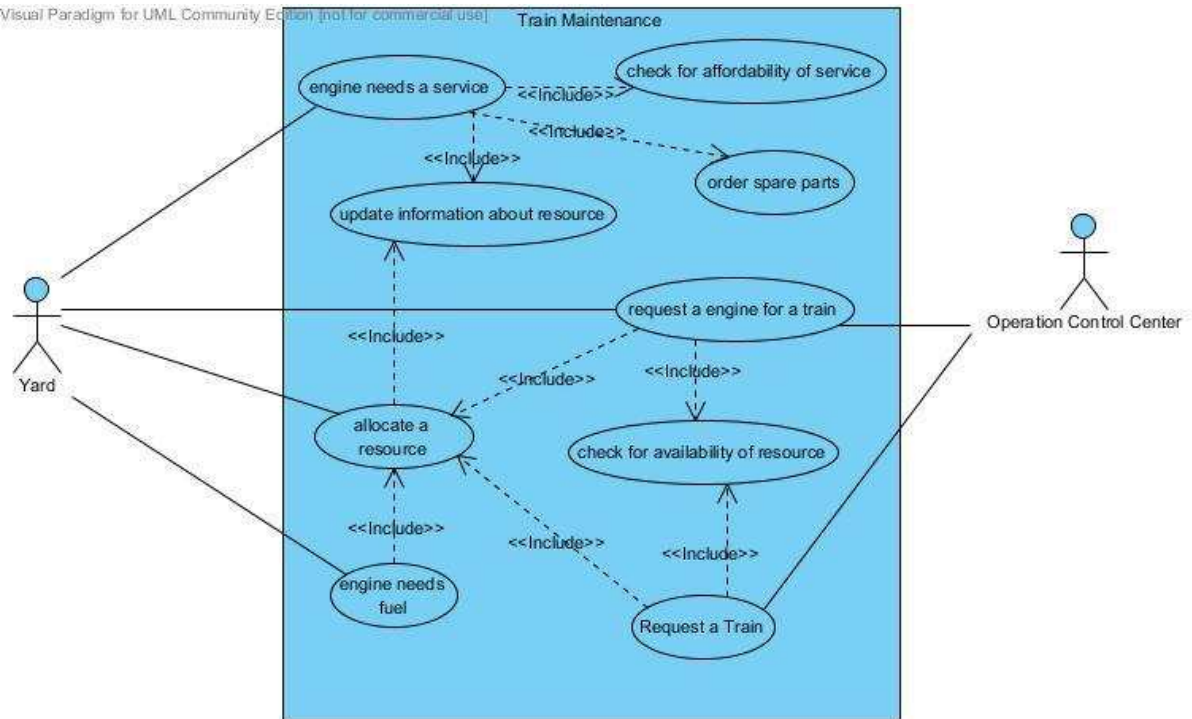
Behavioural Model – Detailed Level

Visual Paradigm for UML Community Edition [not for commercial use]



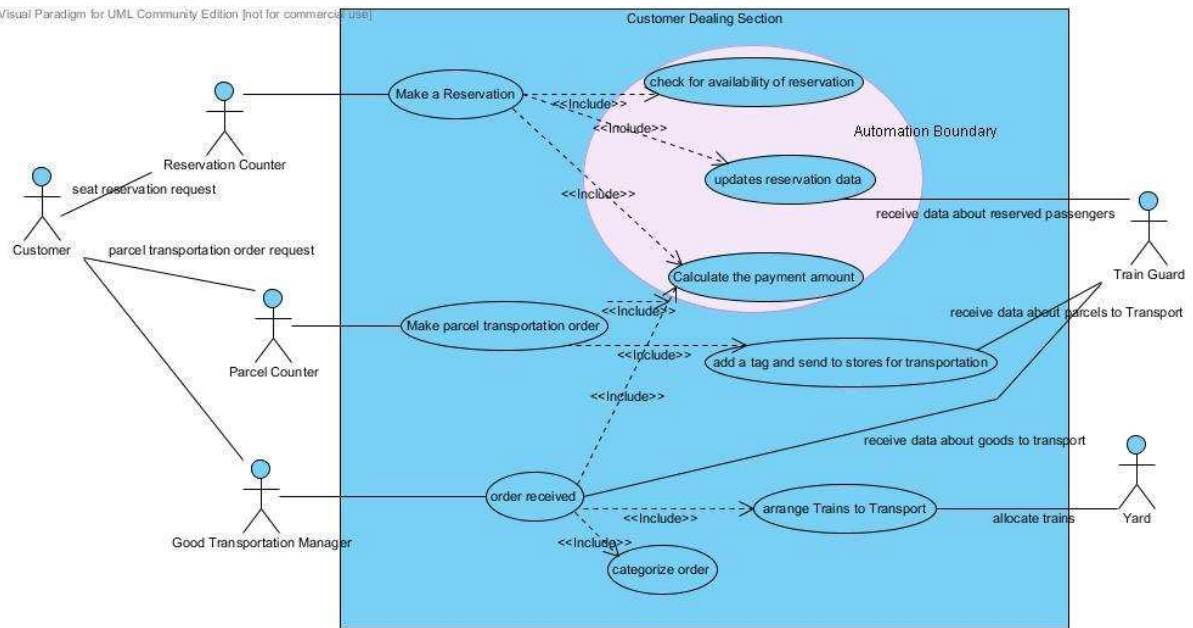
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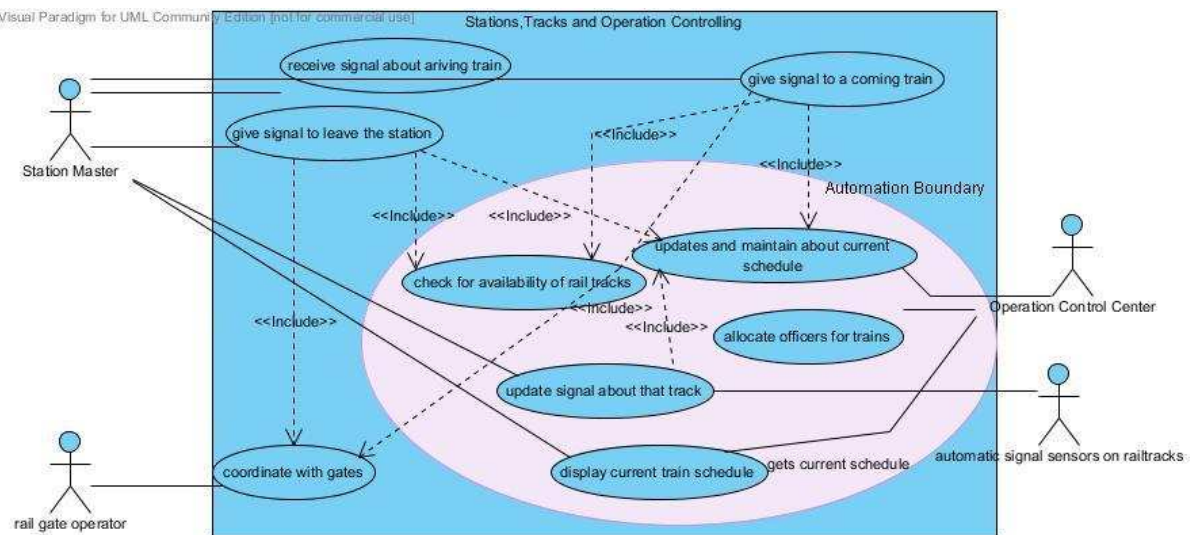


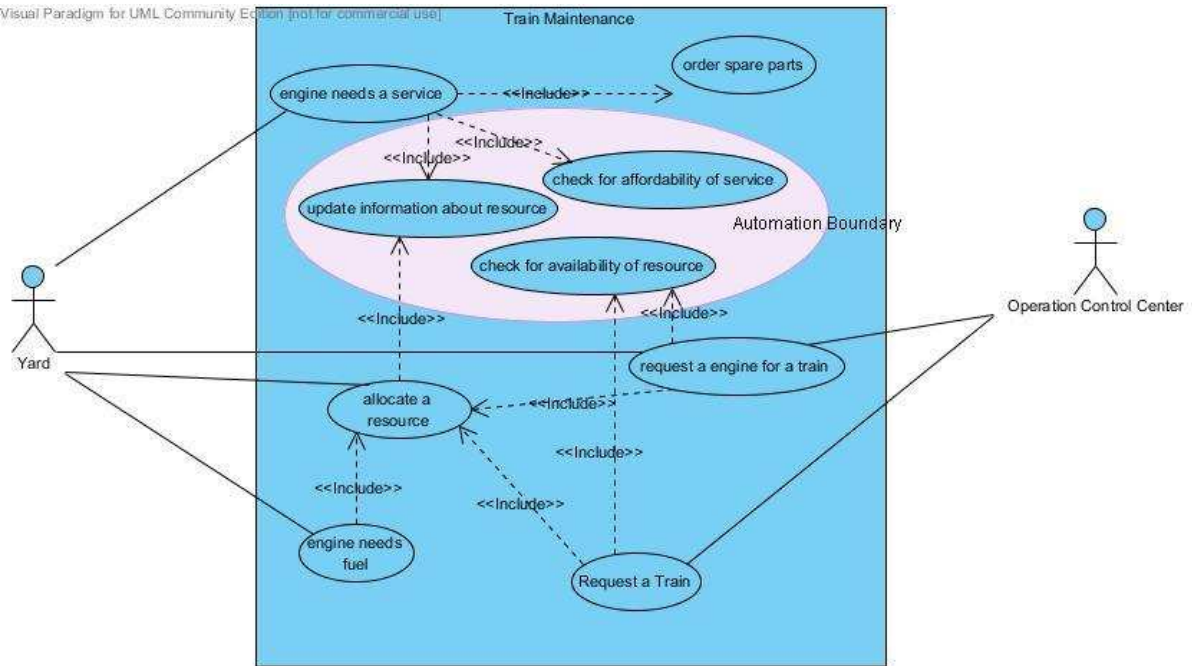
Behavioural Model – Automation Boundary

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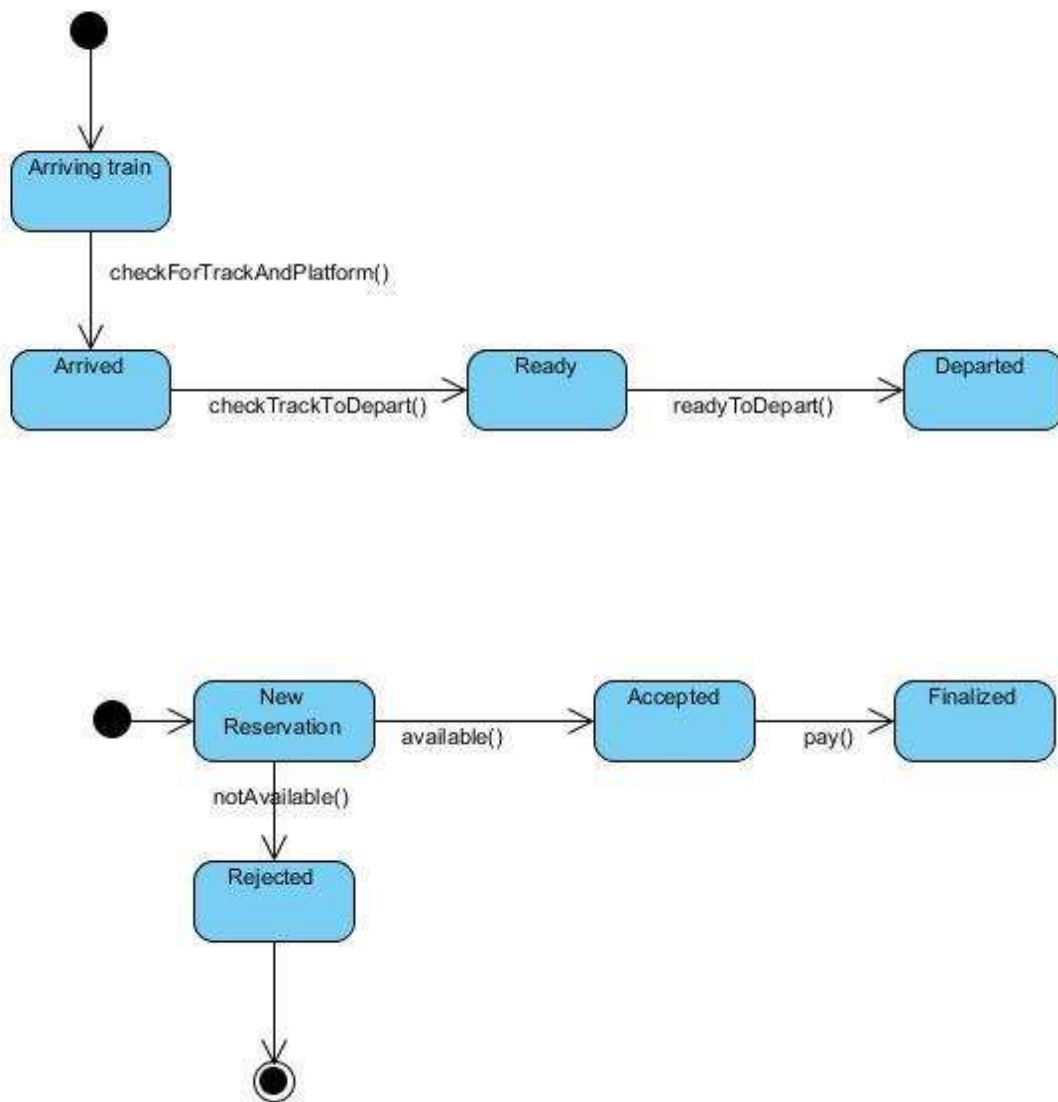


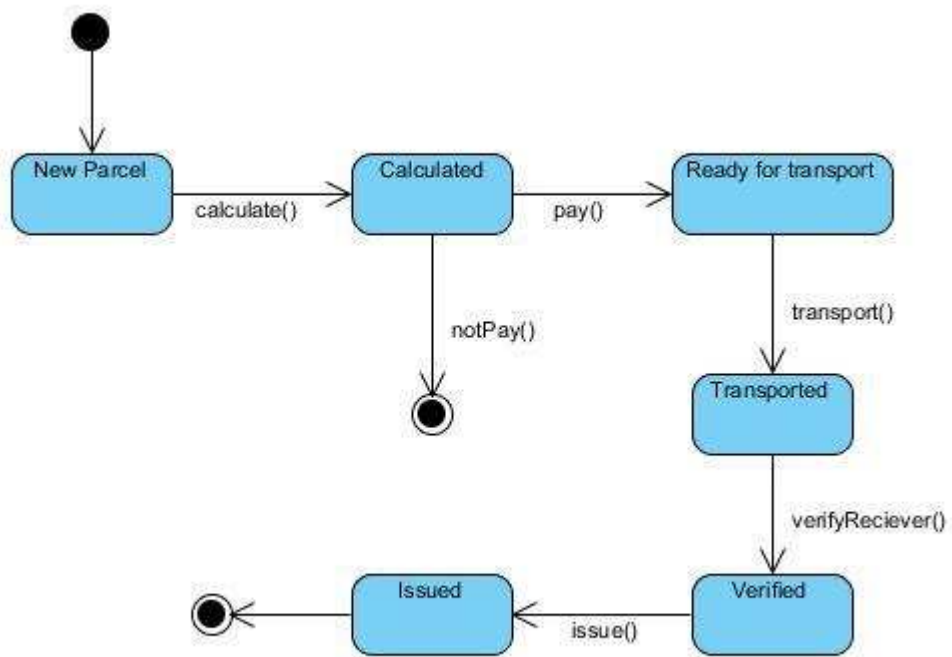
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Information Flow – Main Business Activities





Information Flow – Within System

