Use Case Name: Register Employees

Actors: Customer

Preconditions: Database should be running.

Description:

1. The company wants to provide transportation for all the employees.
2. The company registers details like name, age , grade, gender of all the employees into the database.
   1. The employee details are populated automatically.

Postconditions: All company employees are in the database.

Use Case Name: Select Employees

Actors: Customer

Preconditions: The database should be up and running. It should have details of all the employees.

Description:

1. The system shows the criteria available for choosing employees who need transportation.
2. The customer chooses one criteria from the available options. The criteria can be from below
   1. Age of the employee
   2. Gender of the employee
   3. Grade of the employee

Postconditions: We have the criteria to be used for selecting employees who need transportation.

Use Case Name: Select Mode

Actors: Customer

Preconditions: The database should be up and running. The different modes of transportation should be available in the database.

Description:

1. The company wants a specific type of vehicle for transportation of all the employees.
2. The company can choose one vehicle type from the following
   1. Bus
   2. Cab
   3. Motorcycle

Postconditions: Vehicle type for transportation is chosen.

Use Case Name: Request Bus

Actors: Customer

Preconditions: Selected vehicle type should be ‘Bus’

Description:

1. The company would like to use bus for transportation.
2. The request is sent to Transport Management System with the specified employee criteria.

Postconditions: The company gets the total price and number of busses needed for transportation.

Use Case Name: Request Cab

Actors: Customer

Preconditions: Selected vehicle type should be Cab.

Description:

1. The company would like to use cab for transportation.
2. The request is sent to Transport Management System with the specified employee criteria.

Postconditions: The company gets the total price and number of cabs needed for transportation.

Use Case Name: Request Motorcycle

Actors: Customer

Preconditions: Selected vehicle type should be ‘Motorcycle’

Description:

1. The company would like to use motorcycle for transportation.
2. The request is sent to Transport Management System with the specified employee criteria.

Exception:

Required vehicle type is not available because of bad weather. The customer is informed of this situation and must provide another mode of transportation.

Postconditions: The company gets the total price and number of motorcycles needed for transportation.

Use Case Name: Weather check

Actors: Customer

Preconditions: Selected vehicle type should be ‘Motorcycle’. Weather public API is available.

Description:

1. The information about weather is required for motorcycle to operate.
2. Connect to weather API and get the weather information.
3. The motorcycle transportation is possible when the weather is good.

Exception:

Required vehicle type is not available because of bad weather. The customer is informed of this situation and must provide another mode of transportation.

Postconditions: The information about the weather is obtained.

Use Case Name: Group employees by zone

Actors: Customer

Preconditions: The source and destination zones of employee should be available. The weather should be favorable for transportation.

Description:

1. The system must determine number of employees in each zone.

Postconditions: The number of employees in each destination zone is determined.

Use Case Name: Compute Price

Actors: Customer

Preconditions: The number of employees and vehicle type are available.

Description:

1. The system computes the number of vehicles needed.
2. The system will compute the price for transportation of selected employees.
3. The system will use defined price for this computation.

Postconditions: The price and number of vehicles required for transportation are computed.