

Requirements Documents

Lucas Araujo Ferreira

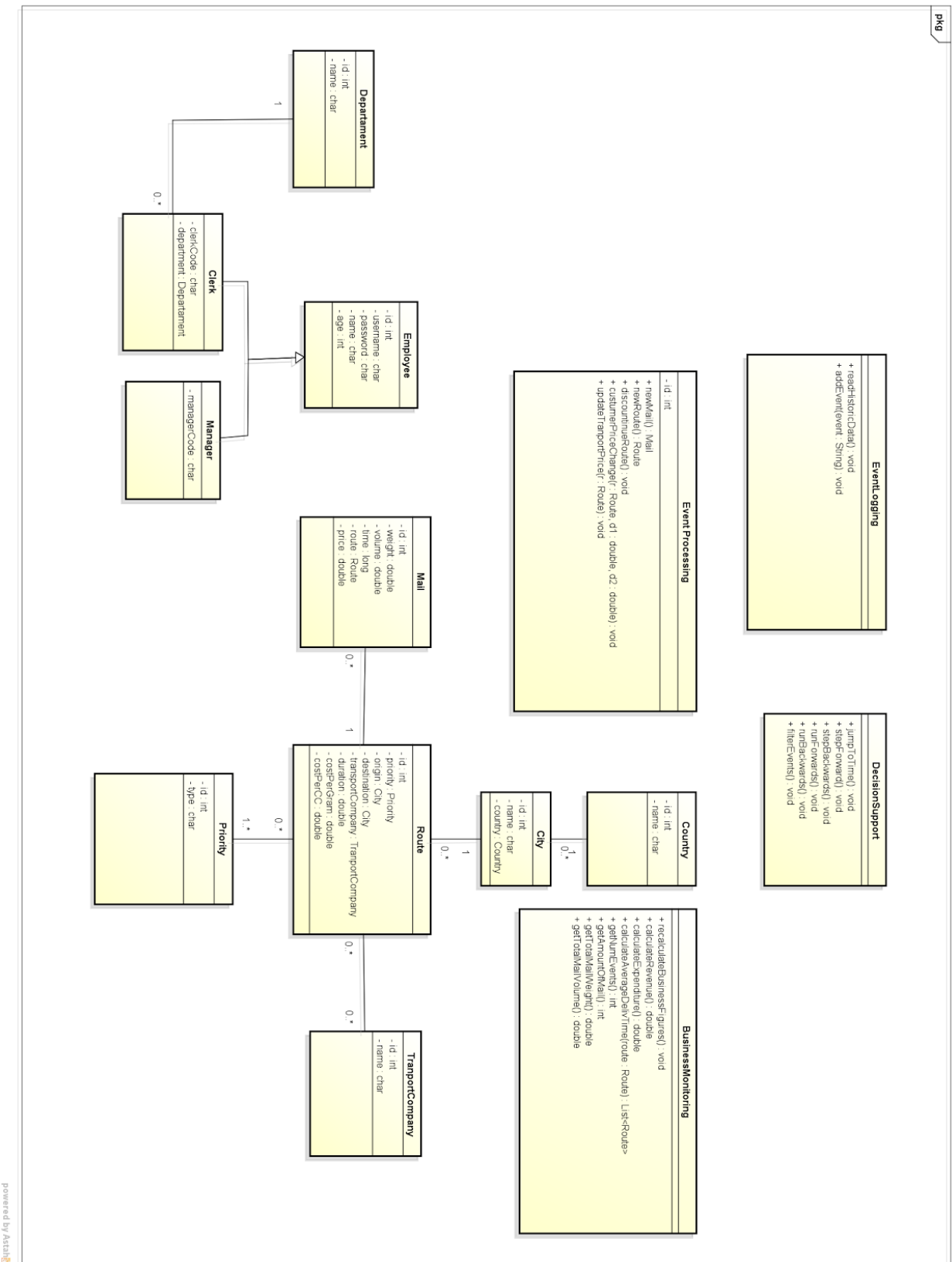
Wentao Kuang

Bei Wang

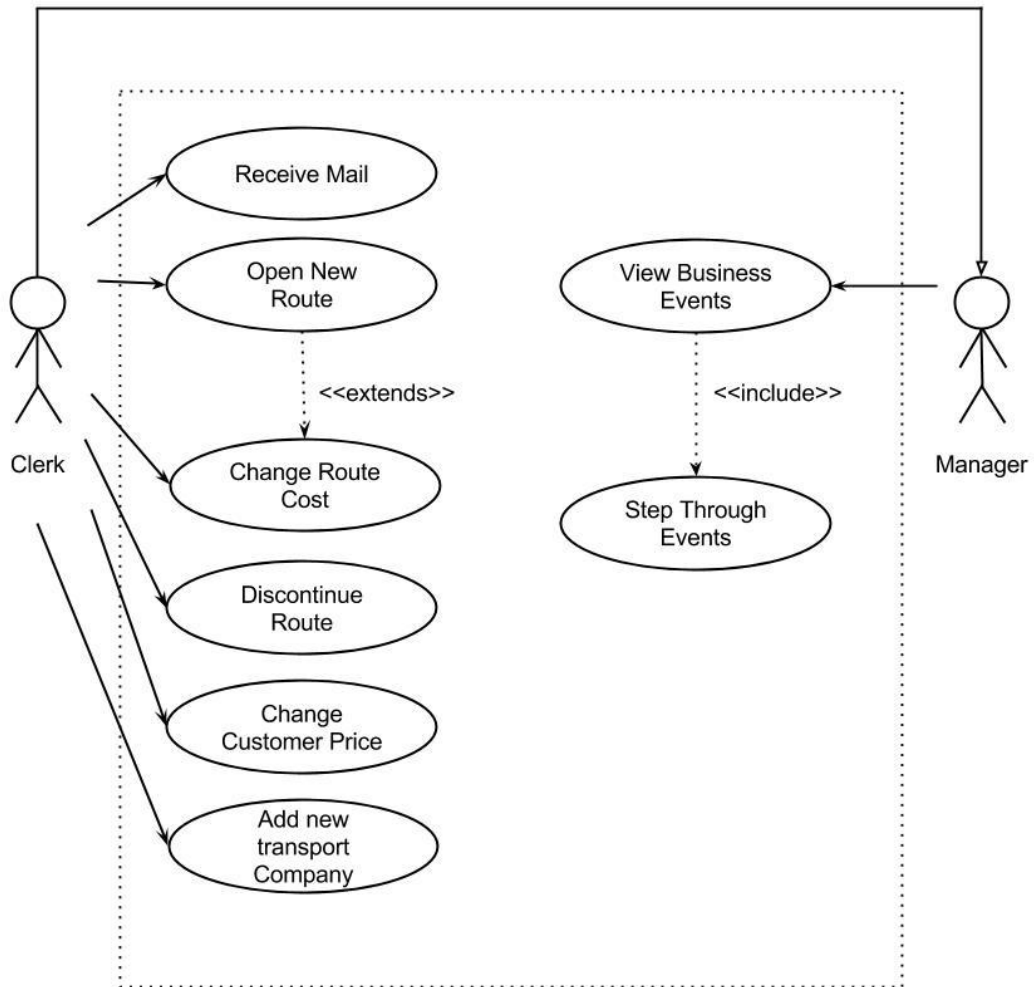
Tinglun Zhang

Tony Work

Class Diagram



Use case diagram



USE CASE: Change Customer Price

Actors

1. Clerk
2. Manager

Preconditions

1. Actor has logged in

Postconditions

1. Th price must be different from the previous one

Main Success Scenario

1. Actor inputs the priority
2. Actor selects the origin
3. System filters list of available routes
4. Actor selects destination
5. System filters list of available routes.
6. Actors selects priority
7. System requests confirmation.
8. System update fields
9. System adds price changing record to log file with timestamp.

Exception Scenarios

1. New price is equal to the old price
 - 1.1. *System notifies that the price is the same.
 - 1.2. [YES?] System cancel the operation
2. New price is invalid
 - 2.1. *System notifies that the new price is an invalid number
 - 2.2. [YES?] System clears input fields

Assumptions

USE CASE: Change Route Cost

Actors

1. Clerk
2. Manager

Preconditions

1. Actor has logged in

Postconditions

Main Success Scenario

1. Actor inputs transit data: (transport company, origin, destination, type)
2. Actor inputs cost data: (perGram, perCC)
3. Actor inputs time data: (Day of week, departure frequency, trip duration)
4. Actor submits information
5. System adds submitted information to database.
6. System clears input fields.

Exception Scenarios

1. Actor inputs invalid values
*System tells user, and highlights input fields.
2. Transport company does not exist
 - 2.1. *System gives user option to add the new transport company, or change input.
 - 2.1.1. If change, system highlights input field.
 - 2.1.2. If not change, GO TO Use Case - Add new Transport Company.

Assumptions

1. There is no maximum package weight / volume.

USE CASE: Open New Route

Actors

1. Clerk
2. Manager

Preconditions

1. Actor has logged in
2. Route with same transport company, priority, origin and destination doesn't already exist.

Postconditions

Main Success Scenario

1. GOTO: Use Case - Change Route Cost

Exception Scenarios

Assumptions

1. There is no maximum package weight / volume.

USE CASE: Add new transport company

Actors

1. Clerk
2. Manager

Preconditions

1. Actor has logged in
2. The transport company doesn't already exist in the database
3. The transport company must offer at least one transport type

Postconditions

Main Success Scenario

1. Actor inputs the information of new transport company.
2. System requests confirmation.
3. Actor does the confirmation of the new information.
4. System adds the information of new transport company to database.

Exception Scenarios

1. The name of new transport company already exists in the system
 - 1.1. *System informs user company already exists, suggest a change.
 - 1.2. *System sets focus to input field.

Assumptions

1. We assume all transport companies have a name.

USE CASE: Receive Mail

Actors

1. Clerk
2. Manager

Preconditions

1. Actor has logged in

Postconditions

1. mail received only if inputs are valid

Main Success Scenario

1. Actor inputs mail priority.
2. System filters list of valid routes.
3. Actor selects an origin and destination.
4. Actor inputs volume, and weight.
5. System calculates cost, displays to actor.
6. System requests confirmation
7. Actor finalises transaction
8. System adds cost to mail object.
9. System adds mail received entry to log file with timestamp.
10. System updates business figures
11. System resets input fields.

Exception Scenarios

1. No valid routes to select
 - 1.1. *System notifies of no routes, suggests change priority
 - 1.2. *System could try to find a priority with matching route??
2. Volume or Weight = 0
 - 2.1. *System notifies actor, highlights offending input object
3. Transaction cancelled
 - 3.1. *System requests confirmation
 - 3.2. [YES?] System clears input fields

Assumptions

1. There is no maximum package weight / volume.

USE CASE: Step Through Events

Actors

1. Manager

Preconditions

1. Manager has logged in
2. |Events| >= 1

Postconditions

Main Success Scenario

1. User presses arrow key, either forward or backward.
2. System calculates business monitoring data
3. System refreshes information to GUI.

Exception Scenarios

1. There is only 1 event
 - 1.1. *System does nothing.

Assumptions

USE CASE: View Business Events

Actors

1. Manager

Preconditions

1. Manager has logged in
2. |Events| >= 1

Postconditions

Main Success Scenario

1. Actors opens view business events form
2. Actors choose different kinds of business events to show.
3. System obtains list of business figures in system, sorted by chronological order.
4. GOTO Use Case - Step Event

Exception Scenarios

Assumptions

1. There is no maximum package weight / volume.

USE CASE: Discontinue Route

Actors

1. Clerk
2. Manager

Preconditions

1. Actor has logged in

Postconditions

Main Success Scenario

1. Actor selects transport company
2. System filters list of available routes
3. Actor selects origin
4. System filters list of available routes.
5. Actor selects destination
6. System filters list of available routes.
7. Actor selects priority
8. System filters list of available routes.
9. Actor submits to discontinue the routes.
10. System requests confirmation.
11. System removes matching route from Transport cost updates log
12. System adds discontinue route record to log file with timestamp.

Exception Scenarios

1. No valid routes to select
 - 1.1. *System notifies of no routes, suggests changing filter options
2. Transaction cancelled
 - 2.1. *System requests confirmation
 - 2.2. [YES?] System clears input fields

Assumptions