

*ASD by prof. Hanhong Lu*

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# Booking System

*Group 3:*

Enkh Erdenebat

Kimtey Chav

Van Gia Luat Nguyen

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## *Booking System*

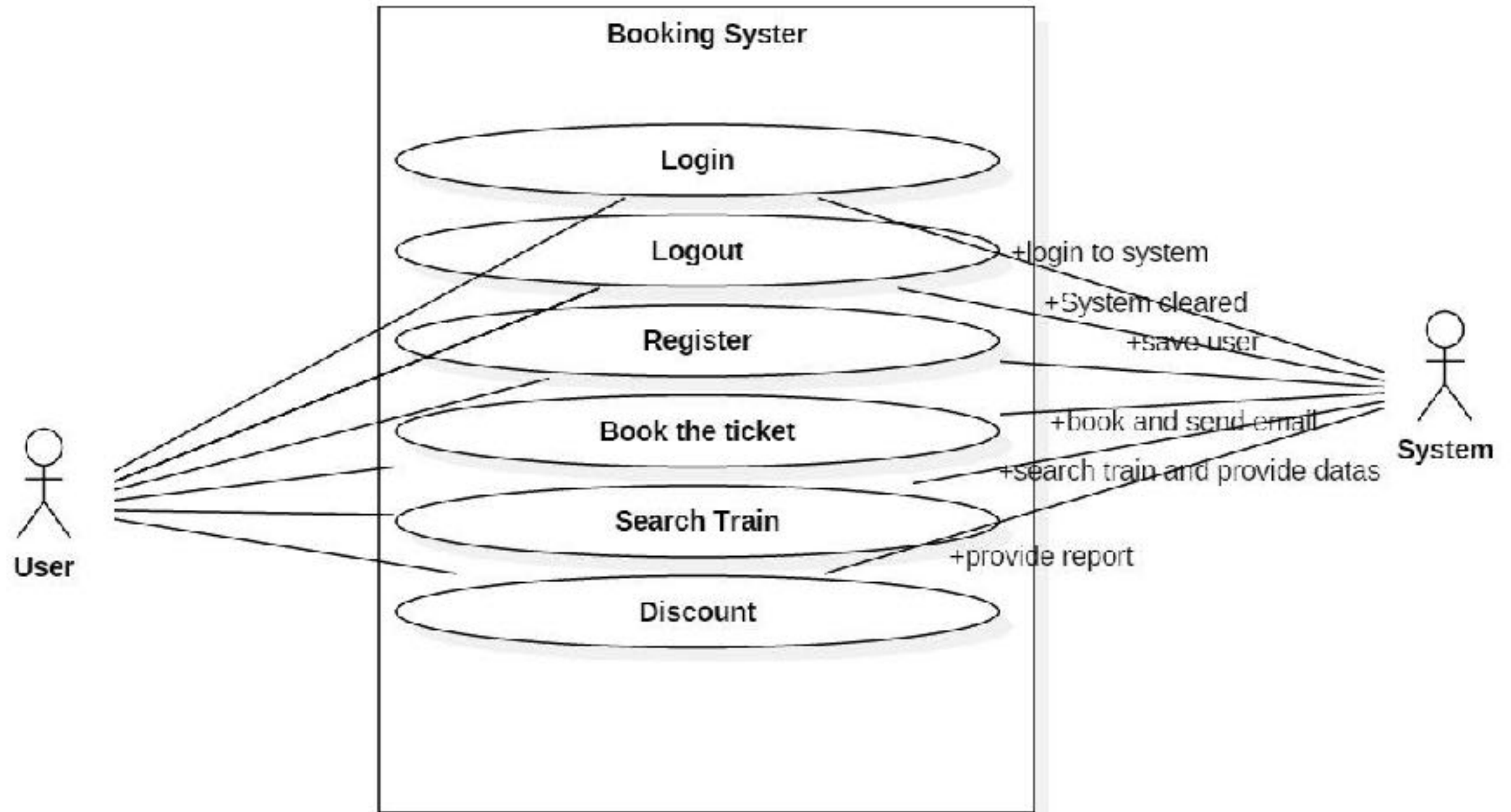
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# Requirements:

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- Register their information to the system.
- Log in to the system.
- Book the train from one place to another (one way / round trip).
- Modified booking.
- Alert by sending email to client after the booking is confirmed.
- Searching the schedule of the train.
- Provide promotion to client.
- Provide reports.
- Allow other application to implement the booking framework (bus / plane / car...)





*Booking System*

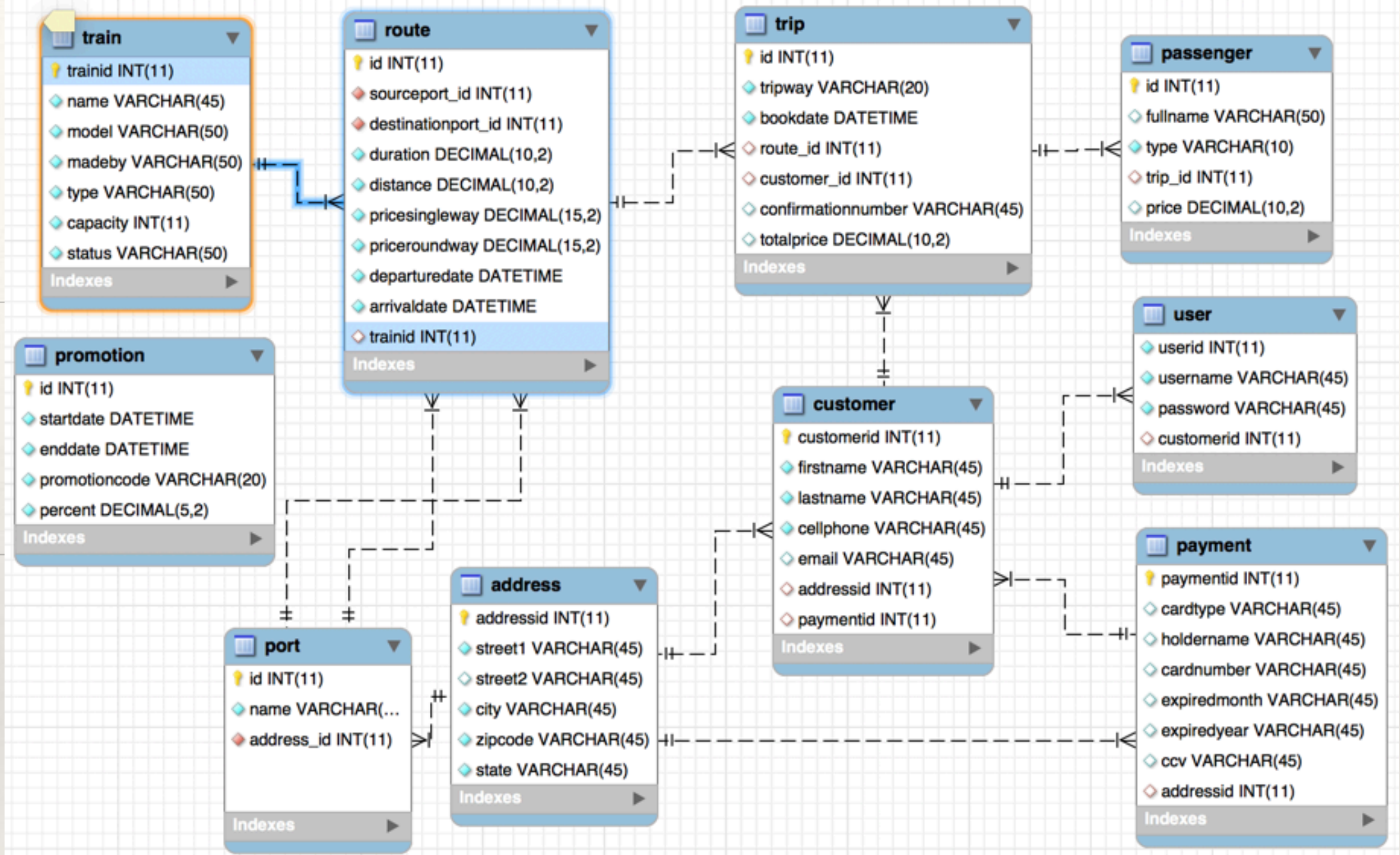
Use Cases:



# Design Patterns:

- Abstract Factory: DAO layer
- Flyweight: ConnectionPool
- CoR: Logger
- Visitor: getPrice of ticket
- Facade, Iterator: Promotion Code
- Builder: Report
- Prototype:
- Singleton, Template Method, Strategy: Email.
- Observer: involve sending an email when never action happy.
- Proxy: Report.





Booking System

ERD:

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*Booking System*

**Class Diagram:**



*Booking System*

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# Technologies

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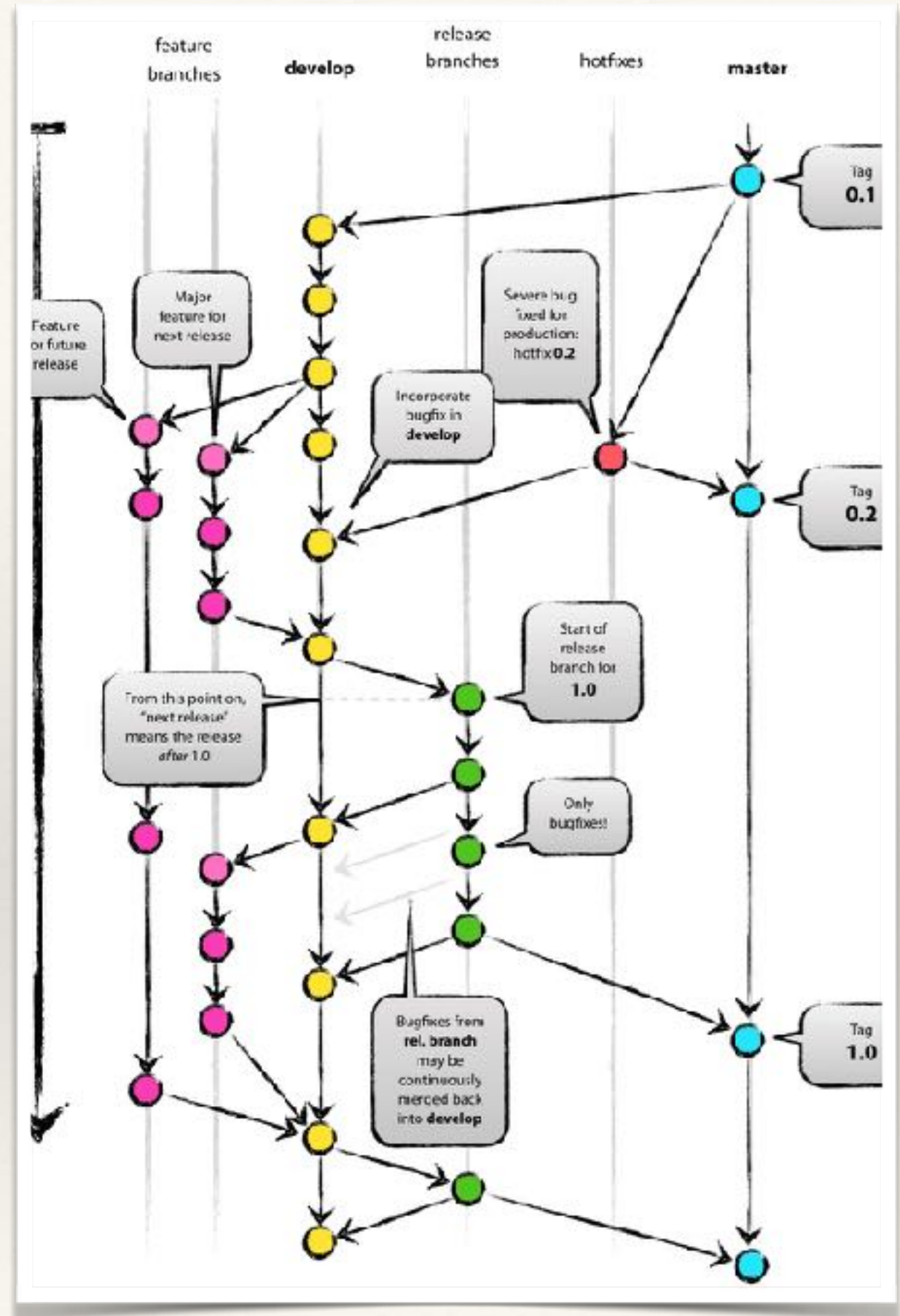
- Ajax
- HTML5/CSS
- JSP/Servlet
- Java
- JUnit Test
- My Sql
- Eclipse



## Booking System

# GIT Hub

- 1 master branches for App
- 1 other branches for Framework





## *Booking System*

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# Done

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- Register their information to the system.
- Log in to the system.
- Book the train from one place to another (one way / round trip).
- Alert by sending email to client after the booking is confirmed.
- Searching the schedule of the train.
- Provide promotion to client.
- Provide reports.
- Allow other application to use the framework (such as bus / plane / car...)



## *Booking System*

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# Ratio

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1. Application java source code - 18% of total source code : 1327 lines of code
2. Application JSP source code - 8% of total source code: 625 lines of code.
3. Framework java source code - 72% of total source code: 5249 line of code



*Booking System*

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# Remaining

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- Modifying a booking
- Optimization
- Cloud deployment





*Booking System*

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## Future Features

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- Apply more abstract classes for extension flexibility.
- Joining LDAP
- It can use with multiple user



© Can Stock Photo

# See Where the Train Can Take You

User: LUAT NGUYEN

[Log out](#)

## Book Tickets:

Trip	From	To	Depart	Return	Traveler
One Way ▾	Burlington, IA - BRL ▾	Creston, IA - CRN ▾	02/03/2018	02/03/2018	4

[Home](#)

[Find Routes](#)

## List Of Available Trains:

No	Train	Class	From	To	Depart Time	Arrival Time	Price One Way / Roud Trip	Selection
1	Train 01	ECONOMY	Burlington, IA - BRL	Creston, IA - CRN	12:00:00	18:30:00	31/62	<input type="radio"/>
2	Train 02	ECONOMY	Burlington, IA - BRL	Creston, IA - CRN	13:00:00	19:30:00	31/62	<input type="radio"/>
3	Train 03	ECONOMY	Burlington, IA - BRL	Creston, IA - CRN	14:00:00	20:30:00	31/62	<input type="radio"/>
4	Train 04	REGULAR	Burlington, IA - BRL	Creston, IA - CRN	15:00:00	21:30:00	34/68	<input type="radio"/>

[Continue](#)

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# Demo

Thanks prof. Hanhong Lu

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## Passenger List

### Passenger Information:

No	Full Name	Passenger Type
1	<input type="text" value="Luat Nguyen"/>	<input type="text" value="Adult"/>
2	<input type="text" value="Jenny Nguyen"/>	<input type="text" value="Child"/>

Promotion Code:

[Home](#)

[Checkout](#)

*Booking System*

# Demo

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## Ordering Tickets Confirmation

### Train Information:

Train	Departure Port	Arrival Port	Duration	Departure Time	Arrival Time
Train 04	Burlington, IA - BRL	Creston, IA - CRN	10.0	2018-02-03 15:00:00	2018-02-03 21:30:00

### Passenger Information:

No	Passenger Name	Passenger Type	Price
1	Luat Nguyen	Adult	34.0
2	Jenny Nguyen	Child	17.0
			Sum Price: 51.0
			Discounted: 5.1000000000000005
			Final Price: 45.9

[Home](#)[Place Order](#)

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# Demo

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*TM Checking System*

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*Q&A*

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