ASD by prof. Hanhong Lu

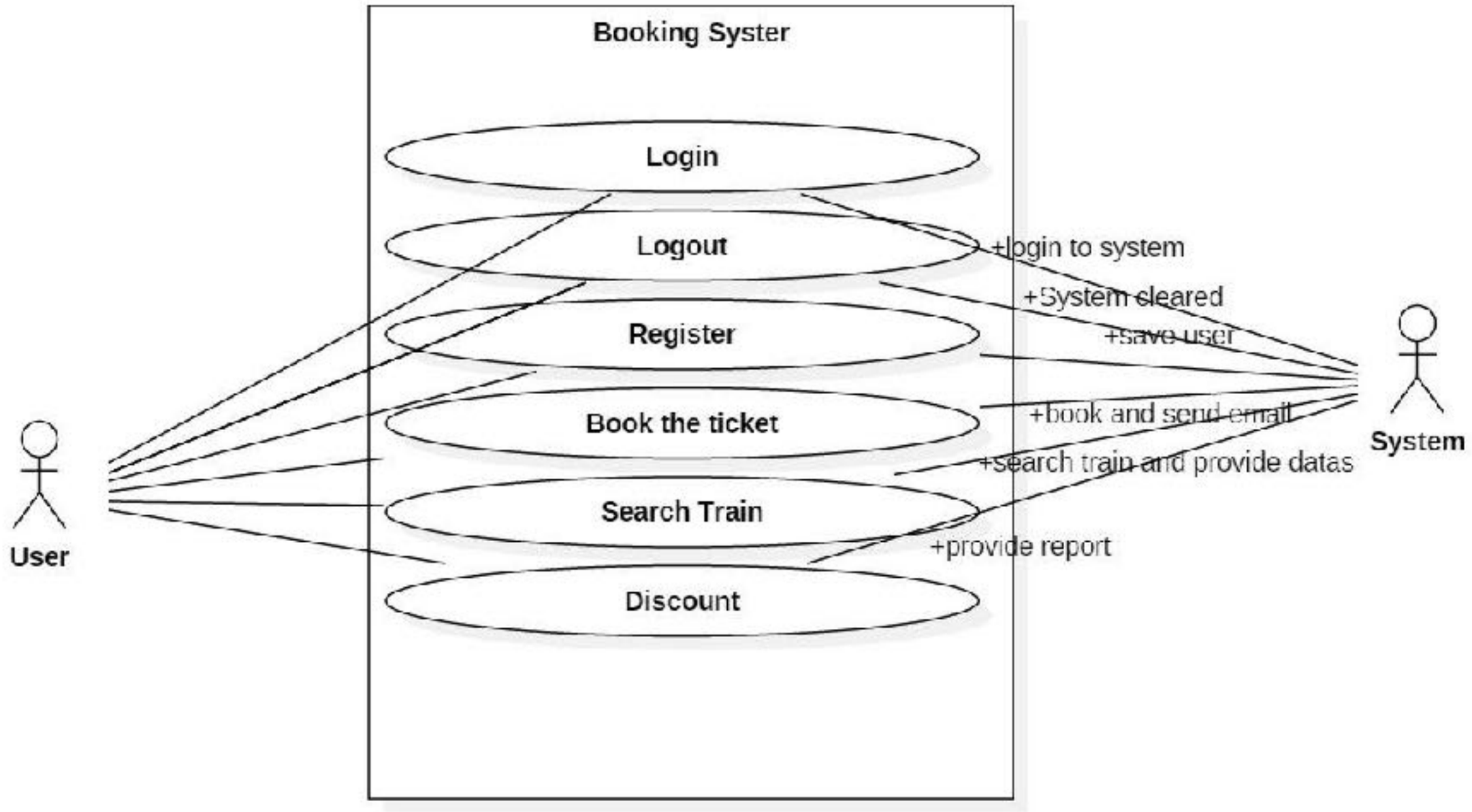
Booking System

Group 3:
Enkh Erdenebat
Kimtey Chav
Van Gia Luat Nguyen

Booking System

Requirements:

- Register their information to the system.
- Log in to the system.
- Book the train form 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…)

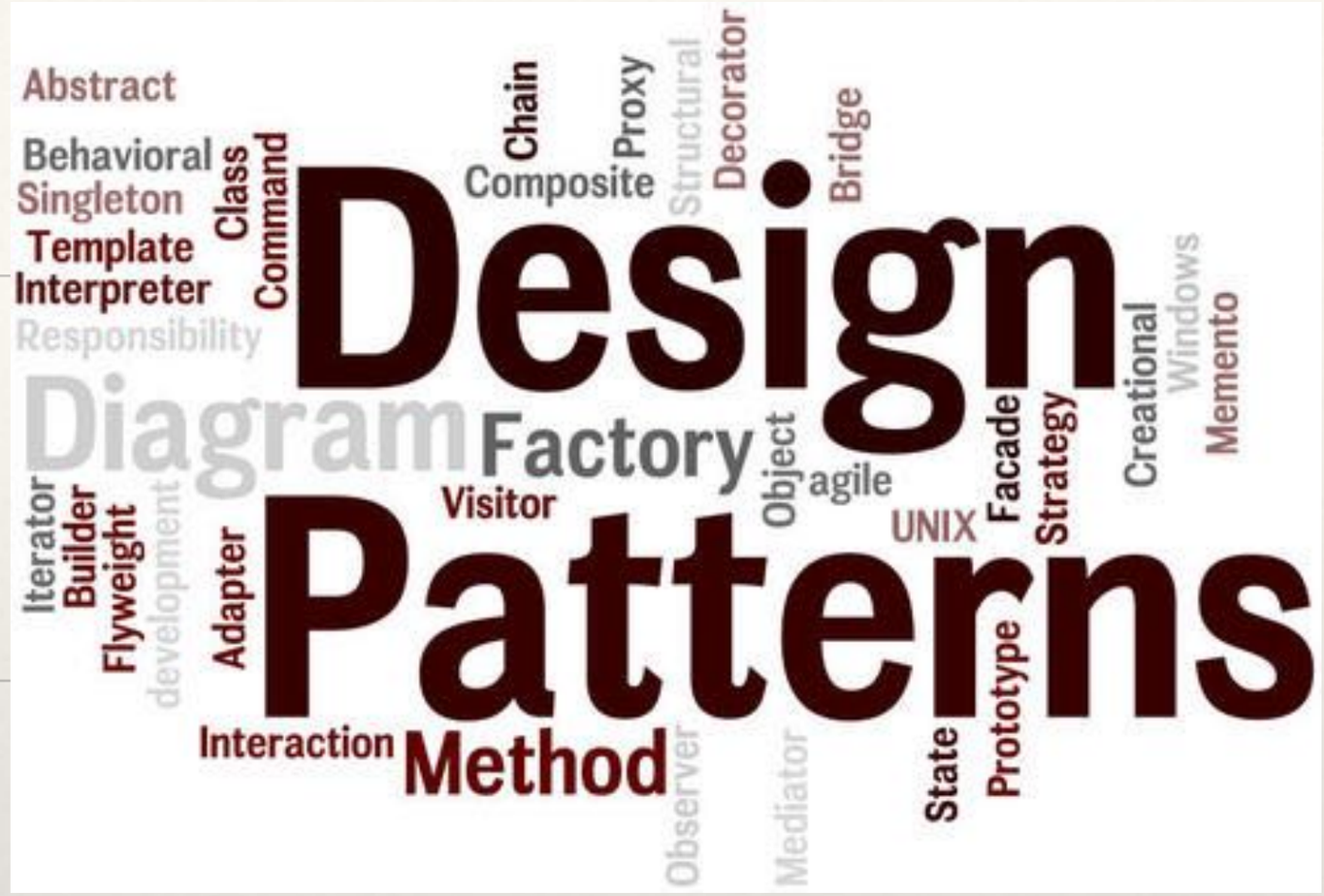


Booking System

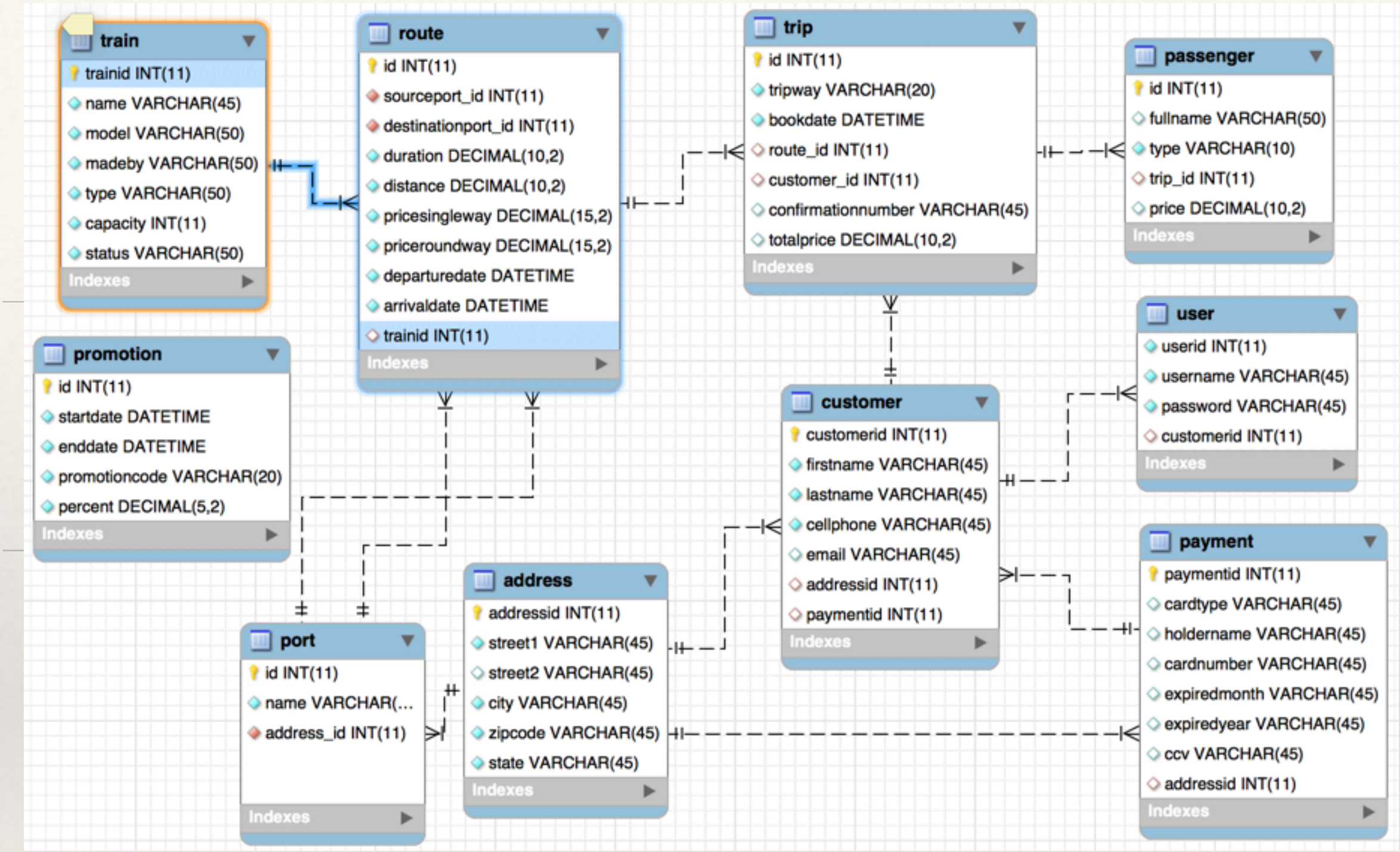
Use Cases:

Booking System

Design Patterns:



- **Abstract Factory**: DAO layer
- **Flyweight**: ConnectionPool
- **CoR**: Logger
- **Visitor**: getPrice of ticket
- **Facecade, 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:

Booking System

Class Diagram:

Technologies

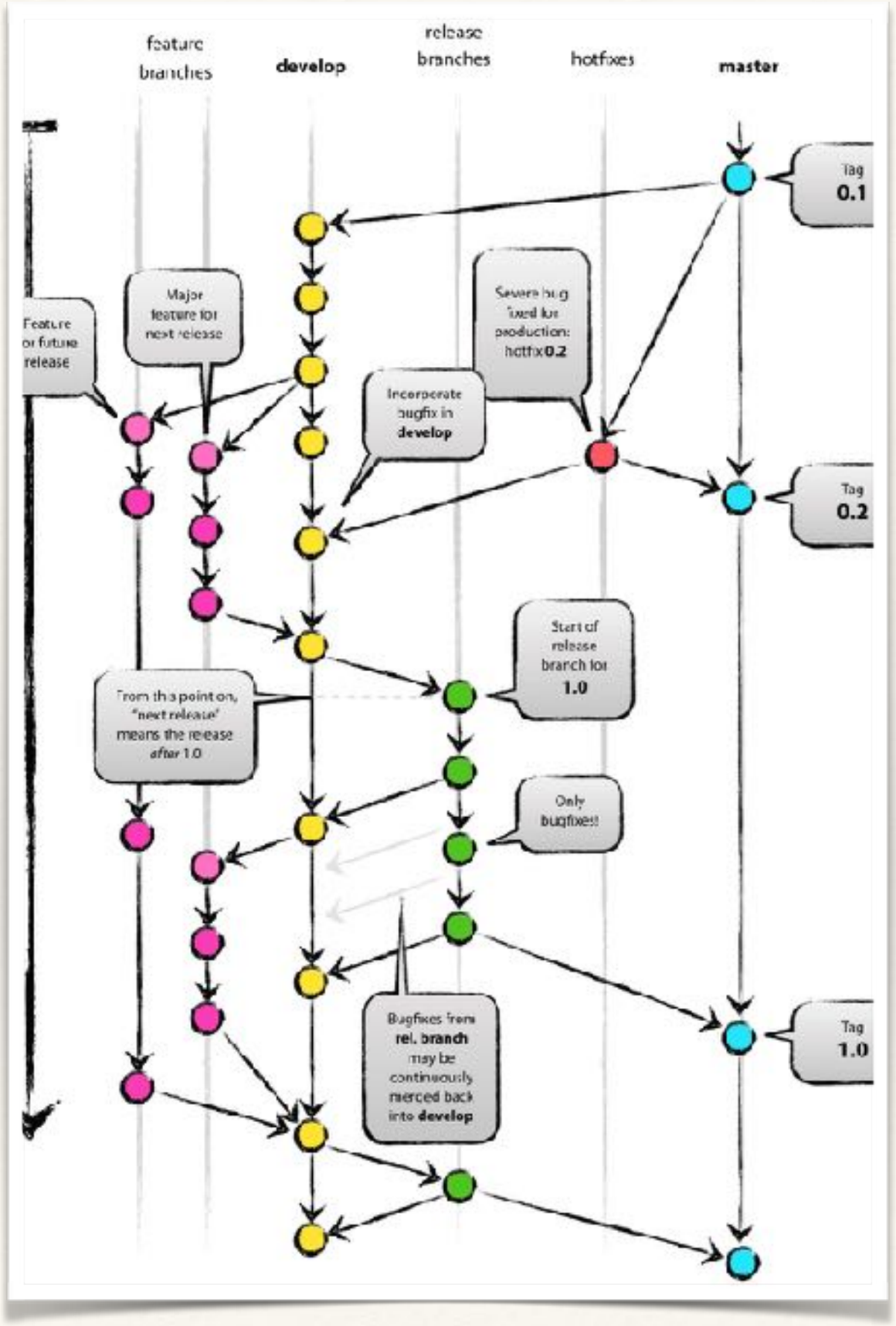
- Ajax
- HTML5/CSS
- JSP/Servlet
- Java
- JUnit Test
- My Sql
- Eclipse

Booking System

GIT Hub

- 1 master branches for App

- 1 other branches for Framework



Booking System

Done

- Register their information to the system.
- Log in to the system.
- Book the train form 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

Ratio

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

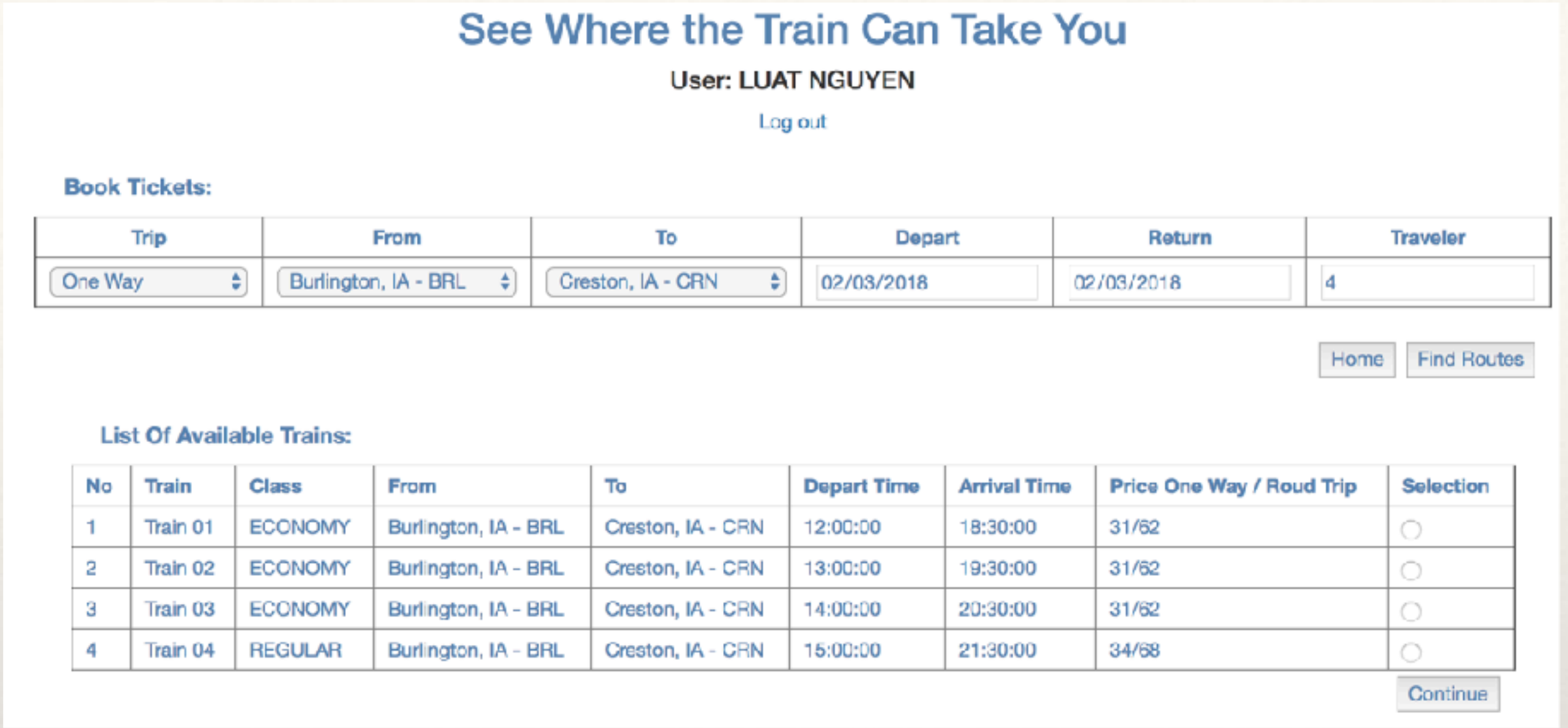
Remaining

- Modifying a booking
- Optimization
- Cloud deployment

Booking System

Future Features

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



Booking System

Demo

Thanks prof. Hanhong Lu

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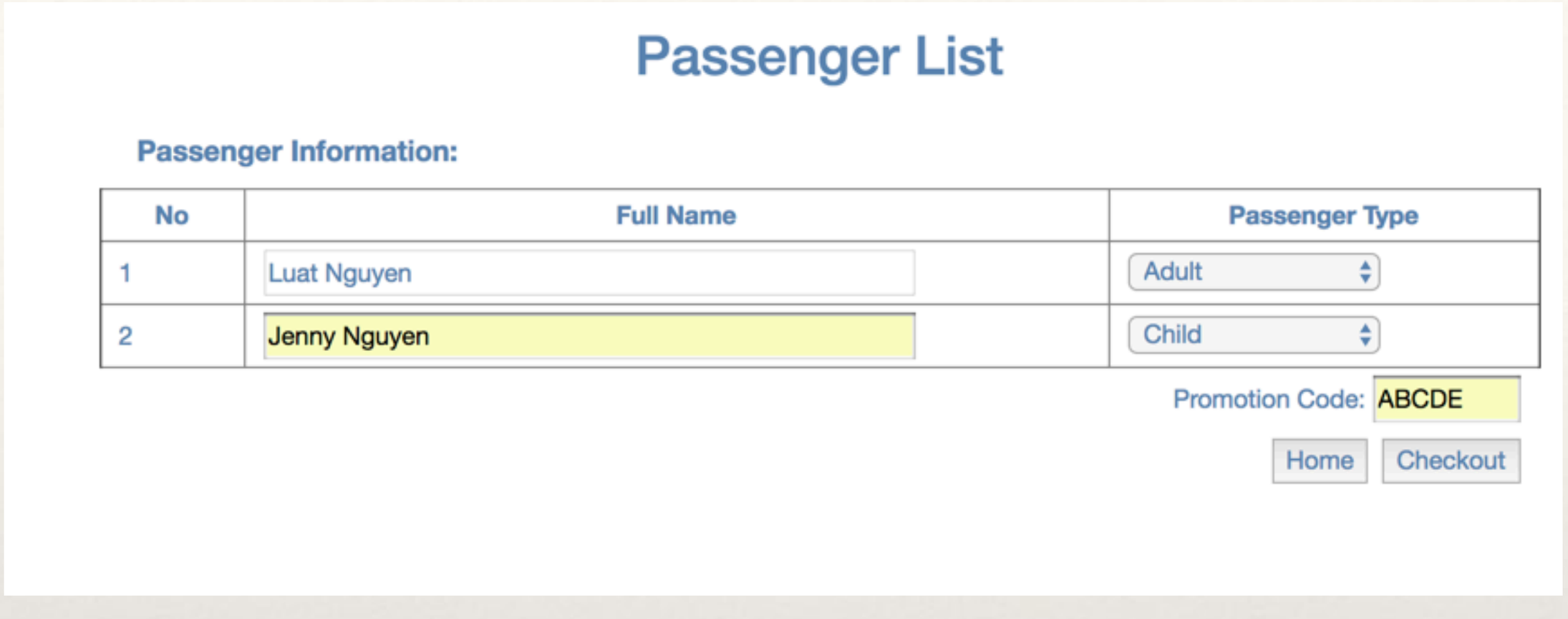

Booking System

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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: 5.100000000000005
			Final Price: 45.9

Home Place Order

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TM Checking System

Q&A