ASD by prof. Hanhong Lu

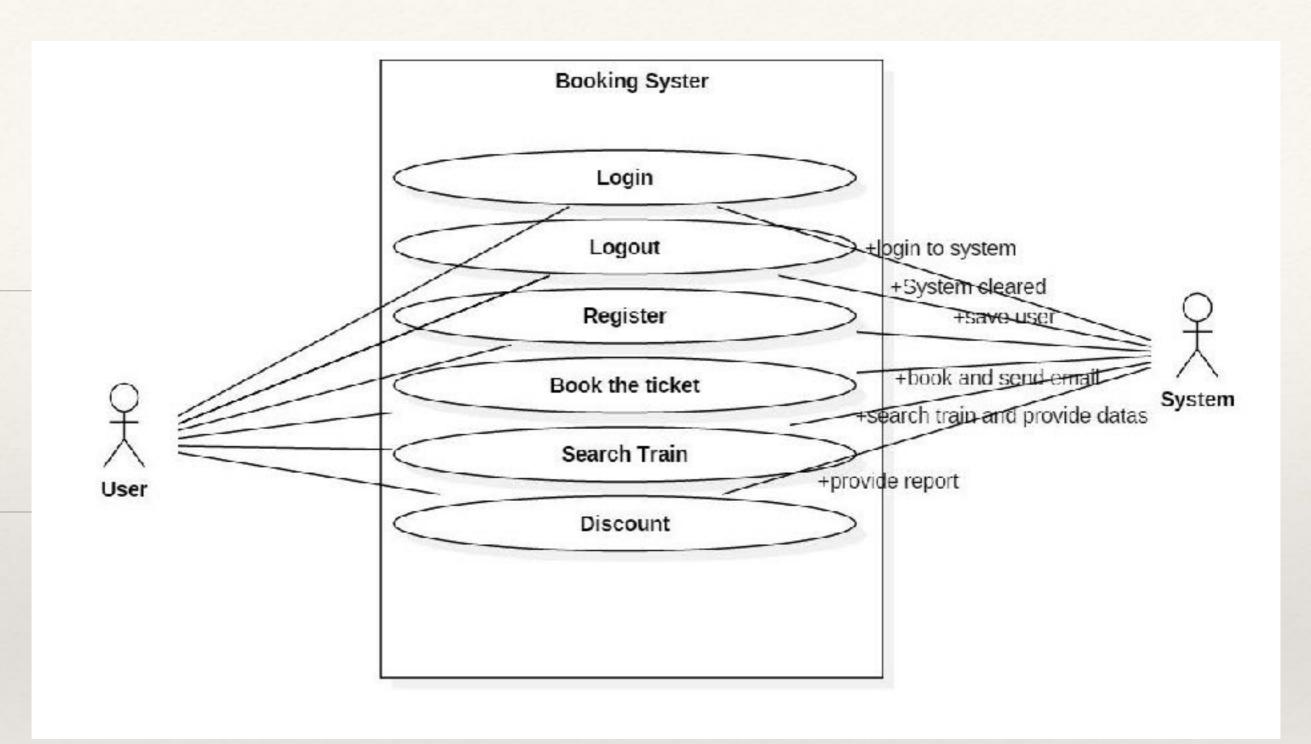
# Booking System

Group 3: Enkh Erdenebat Kimtey Chav Van Gia Luat Nguyen

## 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...)

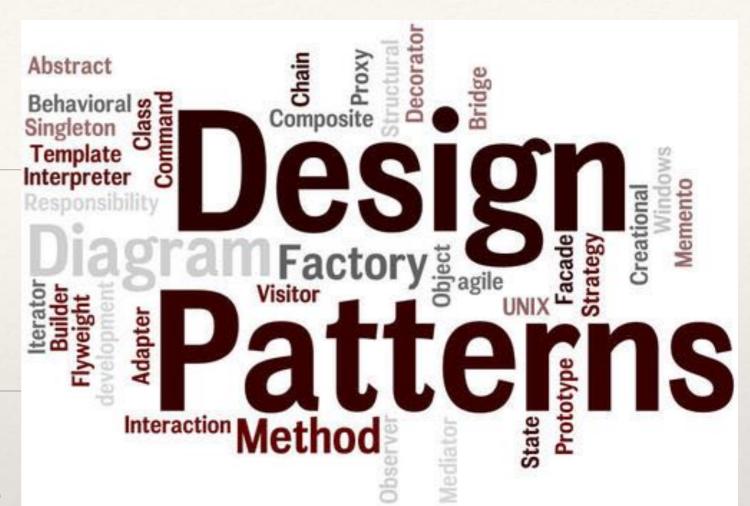


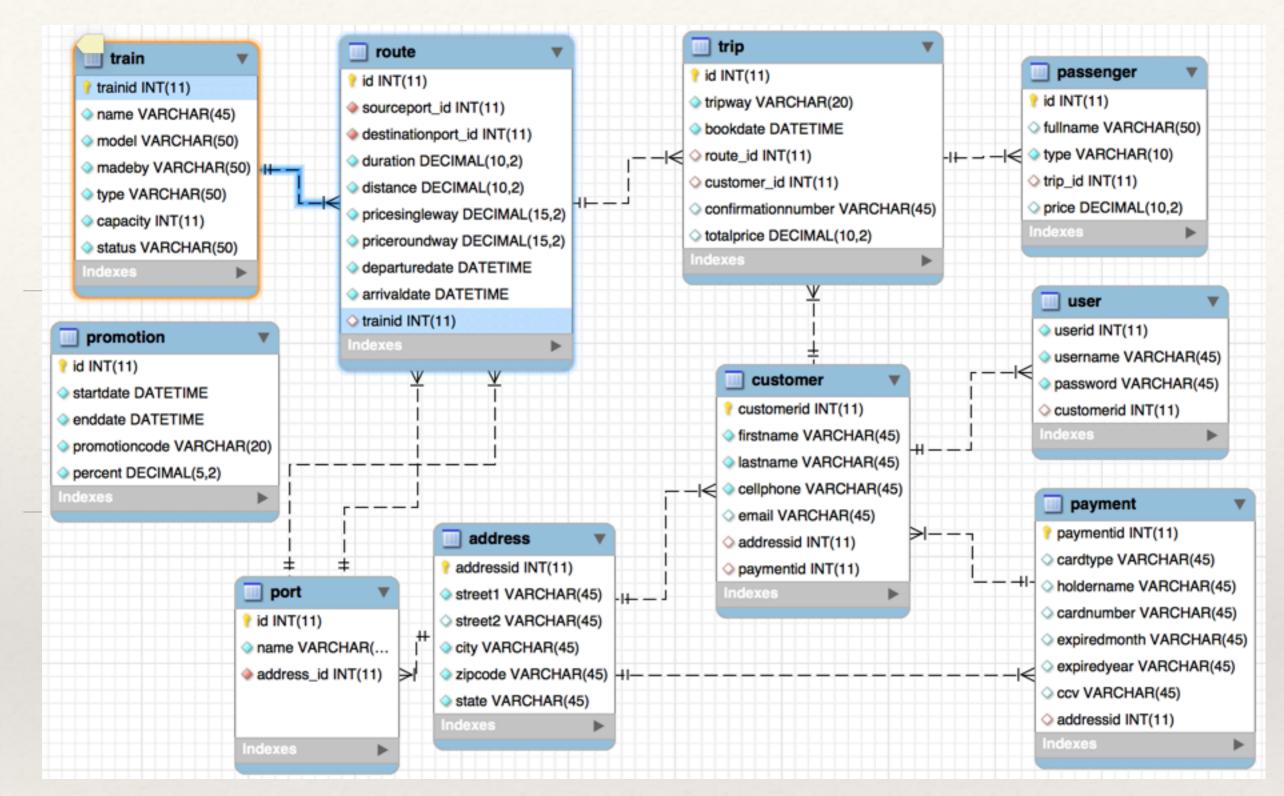


## Use Cases:

# Design Patterns:

- Abstract Factory: DAO layer
- Flyweight: ConnectionPool
- 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.





### ERD:

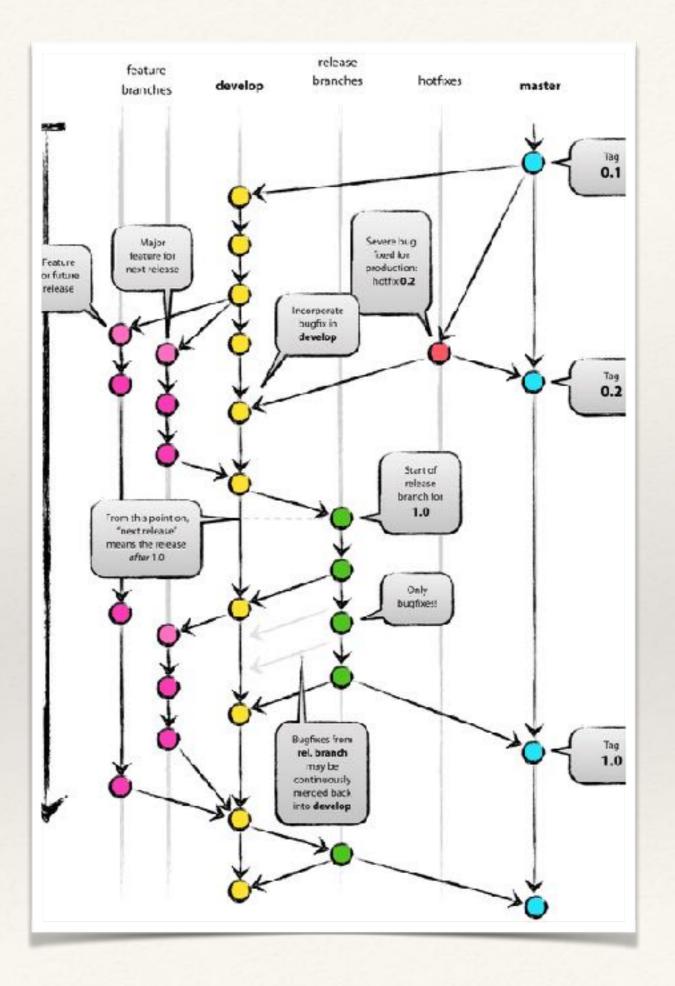
# Technologies

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



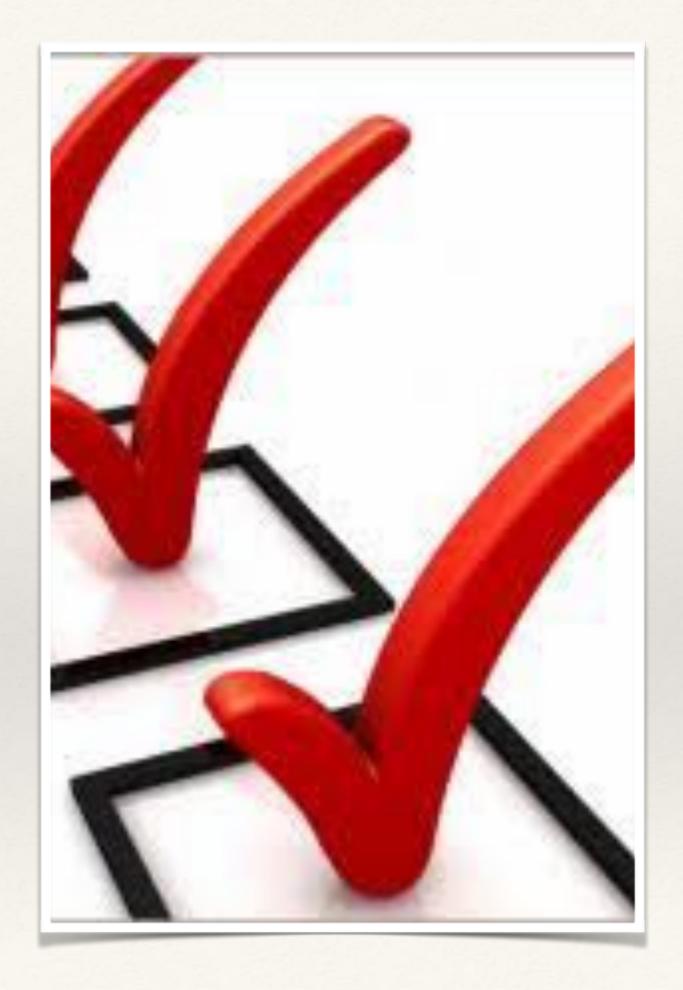
## GIT Hub

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



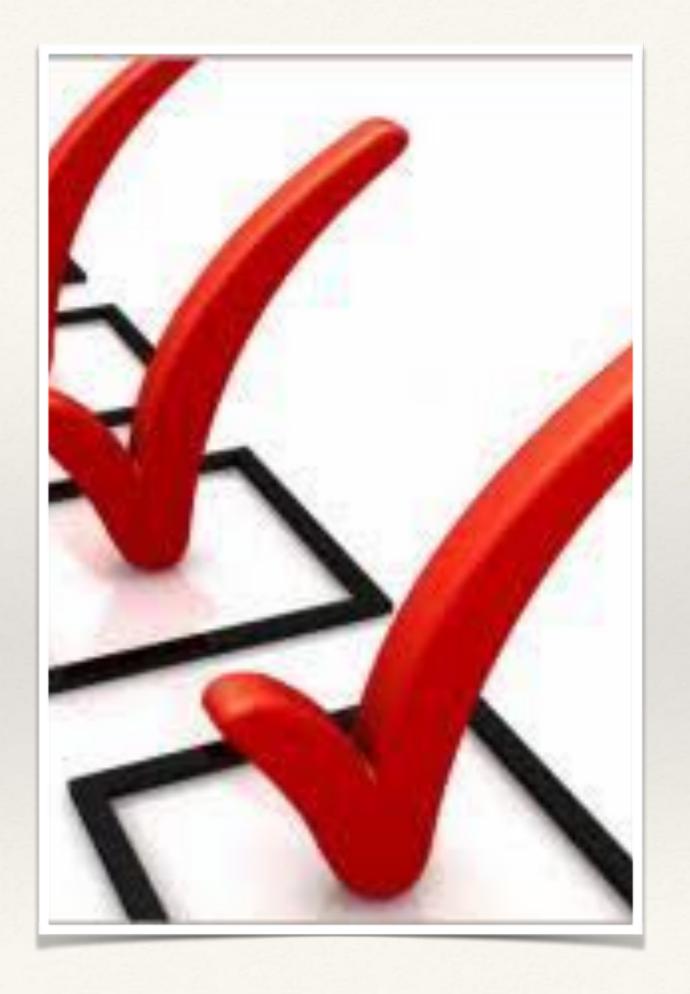
### Done

- 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...)



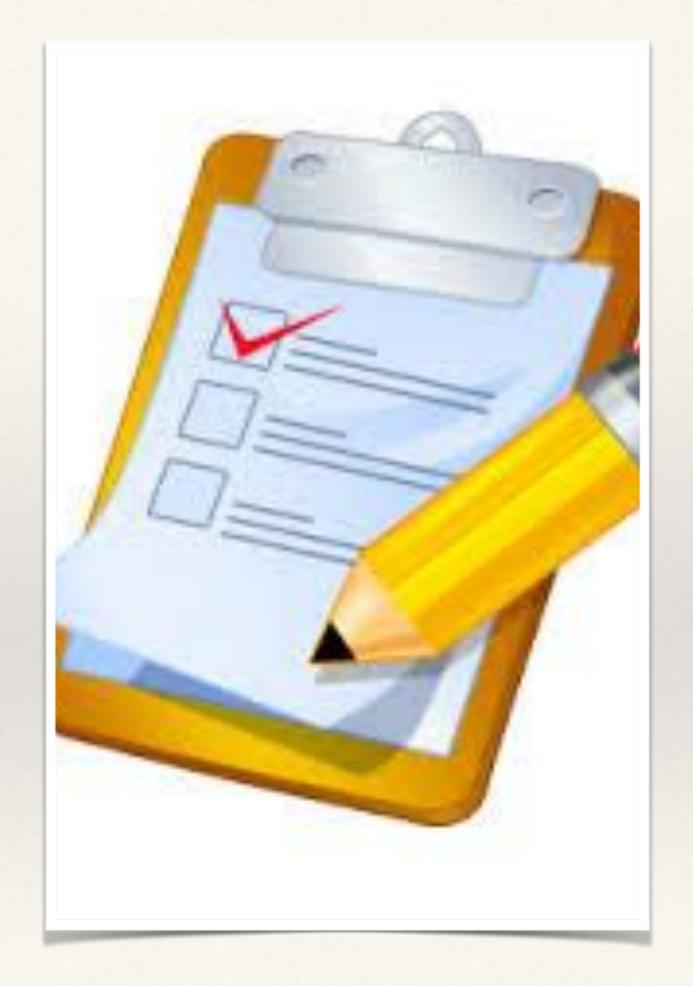
## Ratio

- 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: 5124 line of code



# Remaining

- Modifying a booking
- Optimization
- Cloud deployment



## Future Features

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



#### See Where the Train Can Take You

User: LUAT NGUYEN

Log out

#### **Book Tickets:**

Trip	From	То	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	То	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	0
2	Train 02	ECONOMY	Burlington, IA - BRL	Creston, IA - CRN	13:00:00	19:30:00	31/62	0
3	Train 03	ECONOMY	Burlington, IA - BRL	Creston, IA - CRN	14:00:00	20:30:00	31/62	0
4	Train 04	REGULAR	Burlington, IA - BRL	Creston, IA - CRN	15:00:00	21:30:00	34/68	0

Continue

Booking System

Demo

Thanks prof. Hanhong Lu

Group 3:
Enkh Erdenebat
KimTey Chav
Van Gia Luat Nguyen

### Passenger List

#### **Passenger Information:**

No	Full Name	Passenger Type	
1	Luat Nguyen	Adult \$	
2	Jenny Nguyen	Child \$	

Promotion Code: ABCDE

Home

Checkout

Booking System

Demo

Thanks prof. Hanhong Lu Group 3: Enkh Erdenebat KimTey Chav Van Gia Luat Nguyen

### **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: 5.1000000000000				

Home

Place Order

Booking System

Demo

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TM Checking System

## Q&A

