

TDT4145 Project 2023 - Delivery 2

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Changes from delivery 1

In order to correctly program the user stories. Some changes have changed in the script that creates the tables.

HasSubsection

- Now has OrderIndex Integer NOT NULL
- PK_Track is now declared before FK_Subsection and FK_Track

Customer

- Removed OperatorID, as we interpret that the task allows customers to have several operators.
- Removed FK_RegisteredCustomer
- PhoneNo is now UNIQUE

BedTicket

- Added RouteID and TicketDate (this was simply forgotten in delivery 1)
- Added FK_Occurence (also forgotten in delivery 1)

ChairCar

- PK_Car is now declared before FK_Car and FK_Operator

SleepingCar

- PK_Car is now declared before FK_Car and FK_Operator

CarInArrangement

- PK_CarInArrangement is now declared before FK_Arrangement and FK_Car

Text results from the user stories' requests

User stories A, B and F are purely scripts that fill data into a table and do not provide any results as text. Those will not be included in this part.

All user stories are accessed through running the program.py file. This will create an empty database trainDB.db if it does not already exist, fill it with example data if this data is not yet provided, and prompt the user to use the program through the terminal. It will look like this:

```
Welcome to this train system!  
[1] Show all train routes that stop on a given station on a given weekday  
[2] Search for train routes going between a starting station and an ending station based on date and time  
[3] Register as a customer  
[4] Book a train ticket  
[5] Show all train tickets booked by a given customer  
[6] Quit  
Please choose one of the options above: █
```

After the user has used the system for one of the 5 options, they will be prompted with:

```
Do you wish to use another functionality of the system? (y/n): █
```

If they answer yes, they will be able to use the system again. If they answer no, the program is done.

User story C

```
Train station: Trondheim  
Weekday: Wednesday  
No routes found
```

```
Train station: Trondheim  
Weekday: Monday  
Monday - 2023-04-03 00:00:00  
Route 1: Trondheim - Bodø  
Route 2: Trondheim - Bodø  
Route 3: Mo i Rana - Trondheim
```

User story D

```
Starting station: Steinkjer  
Ending station: Fauske  
What date? (YYYY-MM-DD): 2023-04-03  
What time? (HH:MM): 08:00  
Routes from Steinkjer to Fauske on 2023-04-03 at 08:00:  
Route 1: Steinkjer - Fauske on 2023-04-03 at 09:51  
Route 2: Steinkjer - Fauske on 2023-04-04 at 00:57  
Route 1: Steinkjer - Fauske on 2023-04-04 at 09:51
```

```
Starting station: Mosjøen
Ending station: Trondheim
What date? (YYYY-MM-DD): 2023-04-03
What time? (HH:MM): 08:00
Routes from Mosjøen to Trondheim on 2023-04-03 at 08:00:
Route 3: Mosjøen - Trondheim on 2023-04-04 at 09:14
Route 3: Mosjøen - Trondheim on 2023-04-05 at 09:14
```

User story E

```
Name: Kjell Arne
Email: kjell@email.com
Phone number: 40040400
Customer registered successfully!
```

```
Name: Kjell Arne
Email: kjell@email.com
Phone number: 40040400
Phone number already registered!
Phone number: █
```

User story G

```
Do you want to place a new order? (yes/no): yes
Phone number: 1
Which date would you like to travel? (yyyy-mm-dd): 2023-04-03
Would you like to order a bed or a seat? (bed/seat): seat
Where to where would you like to travel from? (Station): Mo i Rana
Where to where would you like to travel to? (Station): Fauske
Monday - 2023-04-03 00:00:00
Route 1: Trondheim - Bodø
Route 2: Trondheim - Bodø
Route 3: Mo i Rana - Trondheim
Which route would you like to travel on? (Route number): 2
Car number: 3 - Seat number: 1
Car number: 3 - Seat number: 2
Car number: 3 - Seat number: 3
Car number: 3 - Seat number: 4
Car number: 3 - Seat number: 5
Car number: 3 - Seat number: 6
Car number: 3 - Seat number: 7
Car number: 3 - Seat number: 8
Car number: 3 - Seat number: 9
Car number: 3 - Seat number: 10
Car number: 3 - Seat number: 11
Car number: 3 - Seat number: 12
Which car would you like? (Car number): 3
Which seat would you like to purchase? (Seat number): 7
Ticket from Mo i Rana to Fauske on 2023-04-03 successfully ordered! Car: 3 Seat: 7
```

User story H

```
Phone number: 40040400
No orders found for customer ID 1
```

```
Phone number: 1
[[1, '2023-04-03']]
Order number: 1
Order date and time: 2023-04-03
Tickets:
Mo i Rana - Fauske    Car: 3 Seat: 7
```