

IskUber

Data Design Document

Submitted to:

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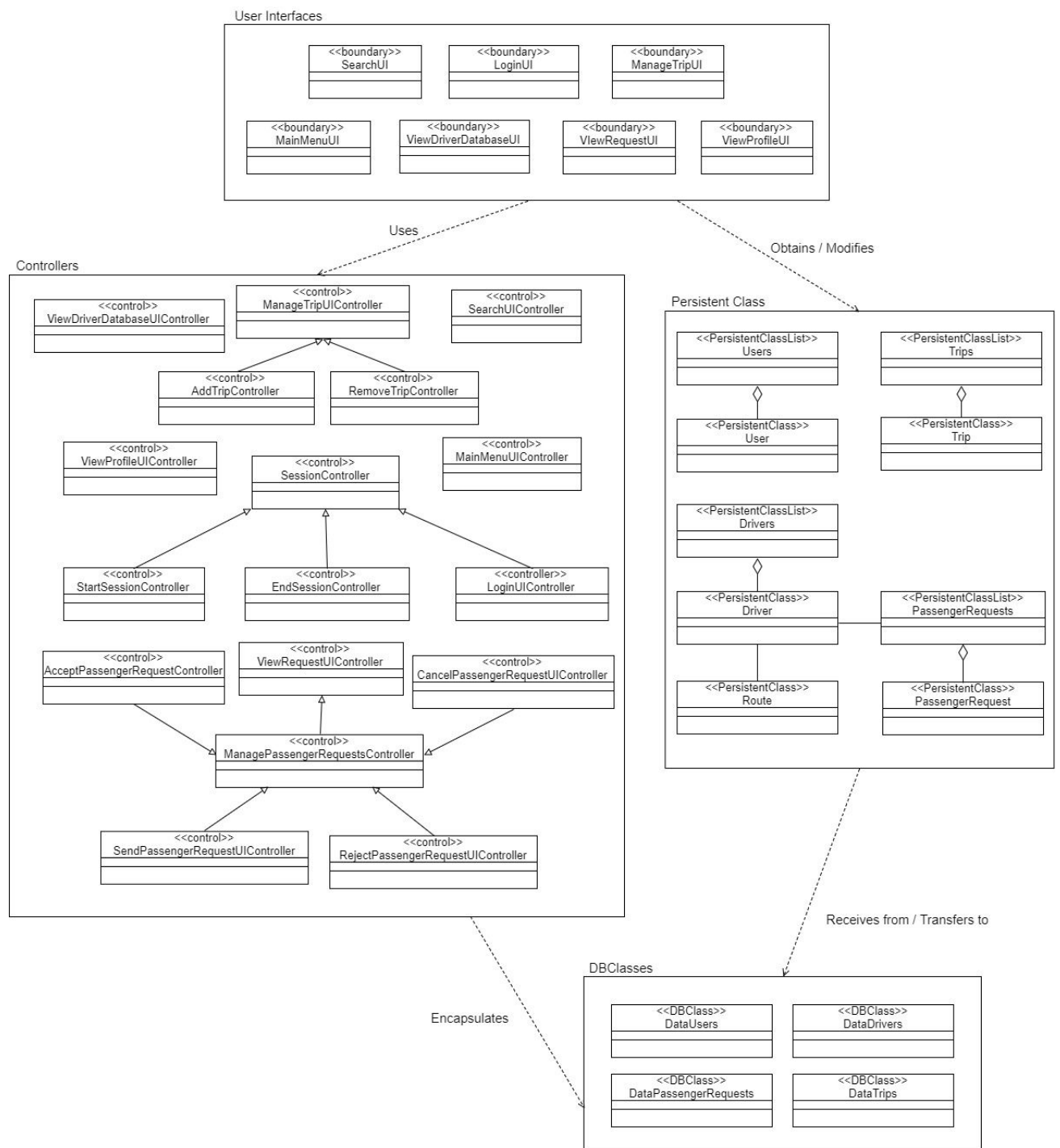
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Revision Control

History Revision:

<i>Revision Date</i>	<i>Person Responsible</i>	<i>Version Number</i>	<i>Modification</i>
11/20/17	Luis Gabriel del Rosario	1.0	Initial Document; added class diagram and filled in tables for DAO and TransferObject Classes.
11/22/17	Juan Gabriel Tamayo	1.1	Added descriptions for DAO and Transfer Object classes, added Data source information and sample tables

Data Design:



Data Access Object (DAO) Classes:

Class Name	Description
LoginUIController	This control class can be performed by the user to log-in to the system.
SessionController	This control class handles the user login sessions.
StartSessionController	This control class activates during the login process.
EndSessionController	This control class activates during the logout process.
MainMenuUIController	This control class can be performed by the user to navigate the main menu options of the system.
ViewRequestUIController	This control class can be performed by the user to view the current requests.
ViewProfileUIController	This control class can be performed by the user to view his/her profile.
SearchUIController	This control class can be performed by the user to search for drivers.
ViewDriverDatabaseUIController	This control class can be performed by the user to view the list of all registered drivers in the database.
ManageTripUIController	This control class can be performed by the user to manage his/her current trips.
AddTripController	This control class is automatically activated upon accepting a passenger request.
RemoveTripController	This control class can be performed by the user to remove any of their current trips.
ManagePassengerRequestsController	This control class handles the driver and passenger requests.
AcceptPassengerRequestController	This control class can be performed by the driver to accept a passenger request.
RejectPassengerRequestController	This control class can be performed by the driver to reject a passenger request.
SendPassengerRequestController	This control class can be performed by the user to send a passenger request to drivers.
CancelPassengerRequestController	This control class can be performed by the user to cancel a passenger request.

TransferObject Classes:

Class Name	Description
DataUsers	This class is in charge of managing the users of the system. DataUsers may add, edit or delete users from the database. Relevant information for users are as follows: username, full name, address, telephone, email address, birthday.
DataDrivers	This class is in charge of managing the drivers of the system. DataDrivers may add, edit or delete drivers from the database. Relevant information for drivers are as follows: username, full name, address, telephone, email address, birthday, and the route the driver is taking.
DataTrips	This class is in charge of managing the overall list of trips in the system. Variables such as user involved, driver involved, and path information are stored here.
DataPassengerRequests	This class is in charge of managing the overall list of passenger requests in the system. Each request consists of specific IDs that map it to specific users and drivers.

List of Data Source:

Data Source Name: users.csv

Description: Contains all relevant user information and credentials.

Sample Source File:

Format: <UserID>:<Username>:<LegalName>:<PassHash>:<ContactNumber>:
<DriverID>

```
0001:scarce:John Scarce
:B2E01C23C7AE817C2FA139F85B6F2C9DDCEF9FD8:1123456789
0:0001

0002:keemstar:Daniel Keem
:2E40639480C5A492ADA85CA13AFB45E07164290B:1234123412
3:NULL

0003:pewdiepie:Felix Kjellberg
:0A2C41D6ABF4E40FE87D8565CAD759BCEB3A97C1:0118999881
9991197253:0002

0004:markiplier:Mark Fischbach
:E9E37419F6E4F3524FB8E84BD186E1C4303507C6:2222222222
2:0003
```

Data Source Name: drivers.csv

Description: Contains all relevant driver information.

Sample Source File:

Format: <DriverID>:<VehicleMake>:<VehicleModel>:<VehicleColor>:<VehiclePlate>:
<MaxPassengers>:<VehicleImage>

```
0001:Honda:Civic:Black:SRC1123:4:0x343...
0002:Honda:Accord:Red:ARC7648:4:0x284...
0003:Ford:Transit:White:FR33C4NDY:12:0x647...
```

Data Source Name: schedules.csv

Description: Contains all schedule information.

Sample Source File:

Format: <SchedID>:<DriverID>:<Time>:<DeparturePoint>:<Destination>

0001:0001:1130:DCS:CAL

0002:0001:1430:CAL:DCS

0003:0002:0800:DFA:ENGG

0004:0003:1015:VANGUARD:MATH

Data Source Name: requests.csv

Description: Contains all request information, including sent, cancelled, accepted, and rejected requests.

Sample Source File:

Format: <RequestID>:<UserID>:<DriverID>:<Type>:<SchedID>:<Comment>

000001:0002:0001:"REQUEST":0001:"LET'S GET ROIT INTO
THE NEWS"

000002:0002:0001:"REJECT":0001:"HEY WHAT'S UP GUYS
IT'S SCARCE HERE"

000003:0003:0004:"REQUEST":0003:NULL

000004:0004:0001:"REQUEST":0002:"WHERE'S THE
BLACKSMITH?!?!?!"

Data Source Name: trips.csv

Description: Contains all confirmed trip information.

Sample Source File:

Format: <DriverID>:<UserID>:<SchedID>

0001:0004:0001

0003:0003:0003

Sample Tables from the Database:

USERS

userID	username	legalName	passHash	contactNo	driverID
smallint	varchar	varchar	varchar	varchar	smallint
9999	x(32)	x(64)	x(40)	9(32)	9999
PK, SA	NN, NC, ND	NN	NN	NN	FK
0001	scarce	John Scarce	B2E01C23C7 AE817C2FA1 39F85B6F2C 9DDCEF9FD8	1123456789 0	0001
0002	keemstar	Daniel Keem	2E40639480 C5A492ADA8 5CA13AFB45 E07164290B	1234123412 3	NULL
0003	pewdiepie	Felix Kjellberg	0A2C41D6AB F4E40FE87D 8565CAD759 BCEB3A97C1	0118999881 9991197253	0002
0004	markiplier	Mark Fischbach	E9E37419F6 E4F3524FB8 E84BD186E1 C4303507C6	2222222222 2	0003

DRIVERS

driverID	vMake	vModel	vColor	plateNo	maxPass	image
smallint	varchar	varchar	varchar	varchar	smallint	blob
9999	x(32)	x(64)	x(32)	x(32)	99	512K
PK, SA	NN	NN	NN	NN	NN	
0001	Honda	Civic	Black	SRC1123	4	0x343...
0002	Honda	Accord	Red	ARC7648	4	0x284...
0003	Ford	Transit	White	FR33C4NDY	12	0x647...

SCHEDULES

schedID	driverID	time	departurePoint	destination
smallint	smallint	smallint	varchar	varchar
9999	9999	0000...2359	x(32)	x(32)
PK, SA	FK, NN	NN	NN	NN
0001	0001	1130	DCS	CAL
0002	0001	1430	CAL	DCS
0003	0002	0800	DFA	ENGG
0004	0003	1015	VANGUARD	MATH

REQUESTS

requestID	userID	driverID	type	schedID	comment
int	varchar	varchar	varchar	varchar	varchar
999999	x(32)	x(64)	x(40)	9(32)	x(255)
PK, SA	NN, NC	NN, NC	NN, NC	NN, NC	NC
000001	0002	0001	REQUEST	0001	LET'S GET ROIT INTO THE NEWS
000002	0001	0001	REJECT	0001	HEY WHAT'S UP GUYS IT'S SCARCE HERE
000003	0003	0004	REQUEST	0003	NULL
000004	0004	0001	REQUEST	0002	WHERE'S THE BLACKSMITH !?!?!

TRIPS

driverID	userID	schedID
smallint	smallint	smallint
9999	9999	9999
PK, FK	PK, FK	PK, FK
0001	0004	0001
0003	0003	0003