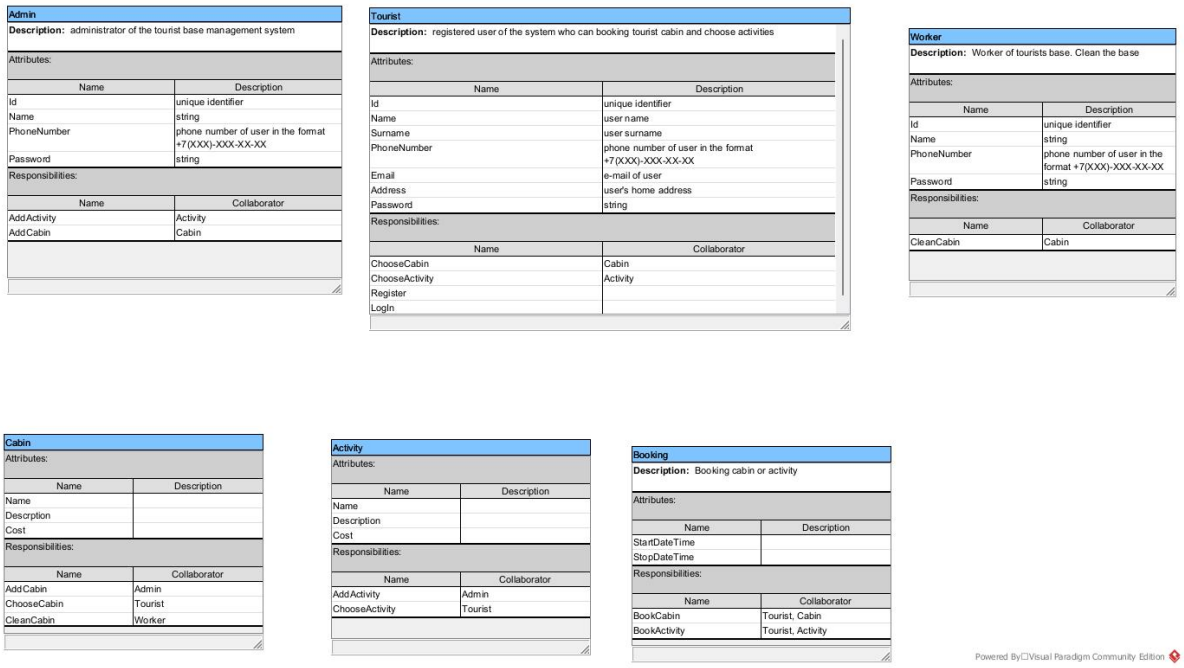
Лабораторная работа №5 по Анализ и проектирование на UML

Выполнил: Манжелевский Михаил М3307

▼ Концептуальная диаграмма классов



Admin

Description: administrator of the tourist base management system

Attributes:

Name	Description
Id	unique identifier
Name	string
PhoneNumber	phone number of user in the format +7(XXX)-XXX-XX-XX
Password	string

Responsibilities:

Name	Collaborator
AddActivity	Activity
AddCabin	Cabin

Tourist

Description: registered user of the system who can booking tourist cabin and choose activities

Attributes:

Name	Description
Id	unique identifier
Name	user name
Surname	user surname
PhoneNumber	phone number of user in the format +7(XXX)-XXX-XX-XX
Email	e-mail of user
Address	user's home address
Password	string

Responsibilities:

Name	Collaborator
ChooseCabin	Cabin
ChooseActivity	Activity
Register	
LogIn	

Worker

Description: Worker of tourists base. Clean the base

Attributes:

Name	Description
Id	unique identifier
Name	string
PhoneNumber	phone number of user in the format +7(XXX)-XXX-XX-XX
Password	string

Responsibilities:

Name	Collaborator
CleanCabin	Cabin

Cabin

Attributes:

Name	Description
Name	
Descrption	
Cost	

Responsibilities:

Name	Collaborator
AddCabin	Admin
ChooseCabin	Tourist
CleanCabin	Worker

Activity

Attributes:

Name	Description
Name	
Description	
Cost	

Responsibilities:

Name	Collaborator
AddActivity	Admin
ChooseActivity	Tourist

Booking

Description: Booking cabin or activity

Attributes:

Name	Description
StartDateTime	
StopDateTime	

Responsibilities:

Name	Collaborator
BookCabin	Tourist, Cabin
BookActivity	Tourist, Activity

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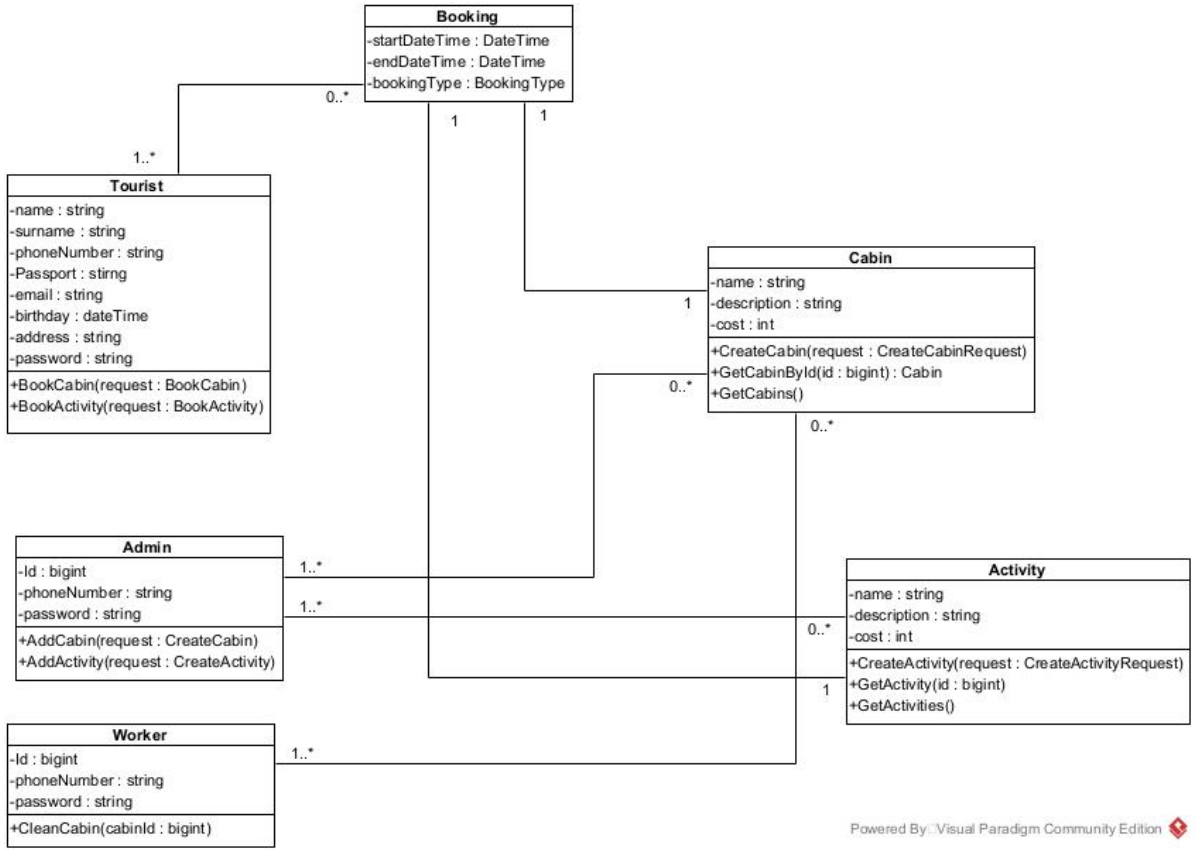
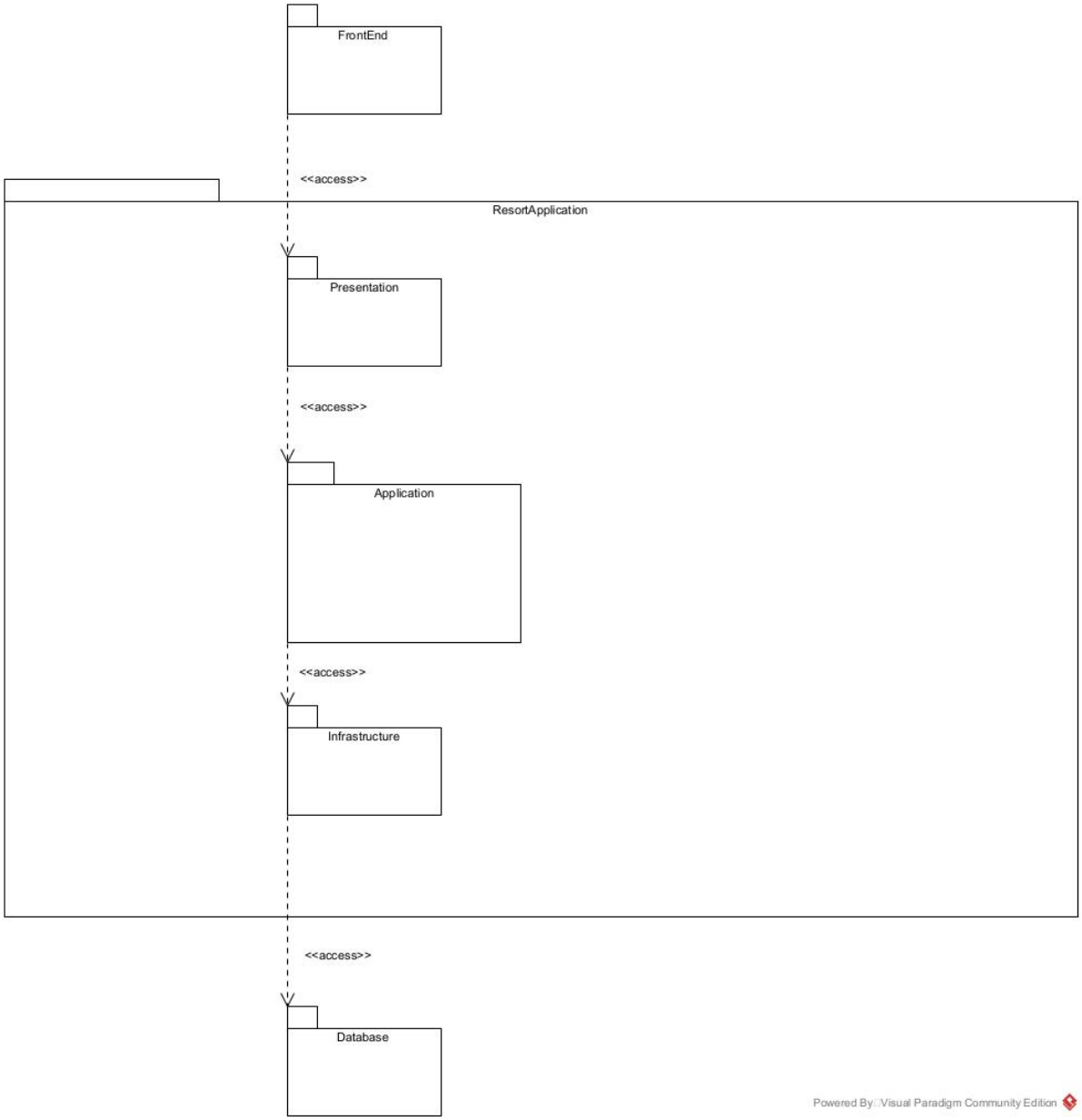


▼ Техническая диаграмма классов


FrontEnd
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ResortApplication
Presentation
<<access>>
Application
<<access>>
Infrastructure
<<access>>
Database
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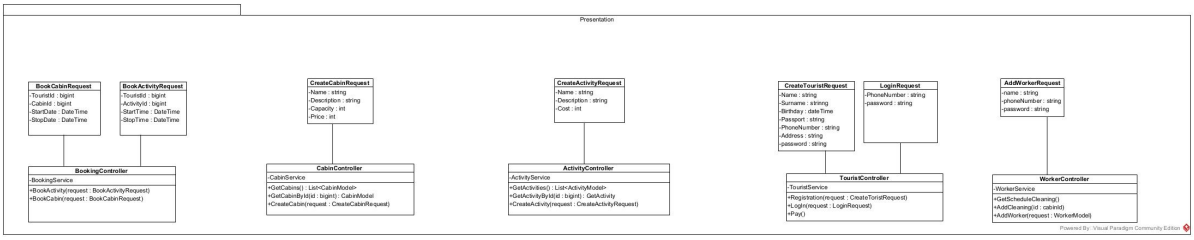
Presentation
BookCabinRequest
-TouristId : bigint
-CabinId : bigint
-StartDate : DateTime
-StopDate : DateTime
BookActivityRequest
-TouristId : bigint
-ActivityId : bigint
-StartTime : DateTime
-StopTime : DateTime
BookingController
-BookingService
+BookActivity(request : BookActivityRequest)
+BookCabin(request : BookCabinRequest)
CreateCabinRequest
-Name : string
-Description : string
-Capacity : int
-Price : int
CabinController
-CabinService
+GetCabins() : List<CabinModel>
+GetCabinById(id : bigint) : CabinModel
+CreateCabin(request : CreateCabinRequest)
CreateActivityRequest
-Name : string
-Description : string
-Cost : int
ActivityController
-ActivityService
+GetActivities() : List<ActivityModel>
+GetActivityById(id : bigint) : GetActivity
+CreateActivity(request : CreateActivityRequest)
CreateTouristRequest
-Name : string
-Surname : strinng
-Birthday : dateTime
-Passport : string
-PhoneNumber : string
-Address : string
-password : string
LoginRequest
-PhoneNumber : string
-password : string
TouristController
-TouristService
+Registration(request : CreateTouristRequest)
+Login(request : LoginRequest)
+Pay()
AddWorkerRequest
-name : string
-phoneNumber : string
-password : string
WorkerController
-WorkerService
+GetScheduleCleaning()
+AddCleaning(id : cabinId)
+AddWorker(request : WorkerModel)
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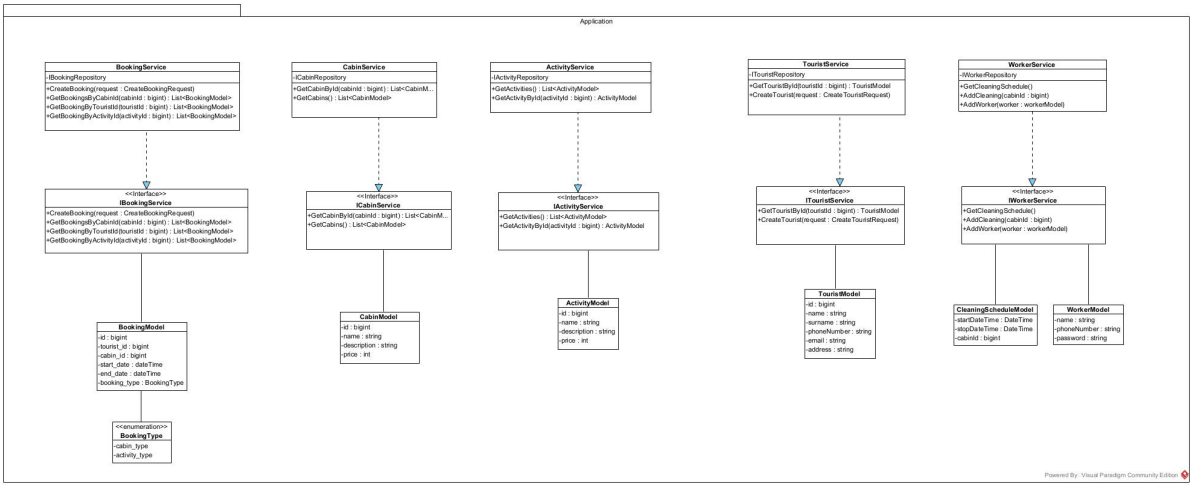
Application
BookingService
-IBookingRepository
+CreateBooking(request : CreateBookingRequest)
+GetBookingsByCabinId(cabinId : bigint) : List<BookingModel>
+GetBookingByTouristId(touristId : bigint) : List<BookingModel>
+GetBookingByActivityId(activityId : bigint) : List<BookingModel>
CabinService
-ICabinRepository
+GetCabinById(cabinId : bigint) : List<CabinM...
+GetCabins() : List<CabinModel>
ActivityService
-IActivityRepository
+GetActivities() : List<ActivityModel>
+GetActivityById(activityId : bigint) : ActivityModel
TouristService
-ITouristRepository
+GetTouristById(touristId : bigint) : TouristModel
+CreateTourist(request : CreateTouristRequest)
WorkerService
-IWorkerRepository
+GetCleaningSchedule()
+AddCleaning(cabinId : bigint)
+AddWorker(worker : workerModel)
<<Interface>>
IBookingService
+CreateBooking(request : CreateBookingRequest)
+GetBookingsByCabinId(cabinId : bigint) : List<BookingModel>
+GetBookingByTouristId(touristId : bigint) : List<BookingModel>
+GetBookingByActivityId(activityId : bigint) : List<BookingModel>
<<Interface>>
ICabinService
+GetCabinById(cabinId : bigint) : List<CabinM...
+GetCabins() : List<CabinModel>
<<Interface>>
IActivityService
+GetActivities() : List<ActivityModel>
+GetActivityById(activityId : bigint) : ActivityModel
<<Interface>>
ITouristService
+GetTouristById(touristId : bigint) : TouristModel
+CreateTourist(request : CreateTouristRequest)
<<Interface>>
IWorkerService
+GetCleaningSchedule()
+AddCleaning(cabinId : bigint)
+AddWorker(worker : workerModel)
BookingModel
-id : bigint
-tourist_id : bigint
-cabin_id : bigint
-start_date : dateTime
-end_date : dateTime
-booking_type : BookingType
CabinModel
-id : bigint
-name : string
-description : string
-price : int
ActivityModel
-id : bigint
-name : string
-description : string
-price : int
TouristModel
-id : bigint
-name : string
-surname : string
-phoneNumber : string
-email : string
-address : string
CleaningScheduleModel
-startDateTime : DateTime
-stopDateTime : DateTime
-cabinId : bigint
WorkerModel
-name : string
-phoneNumber : string
-password : string
<<enumeration>>
BookingType
-cabin_type
-activity_type
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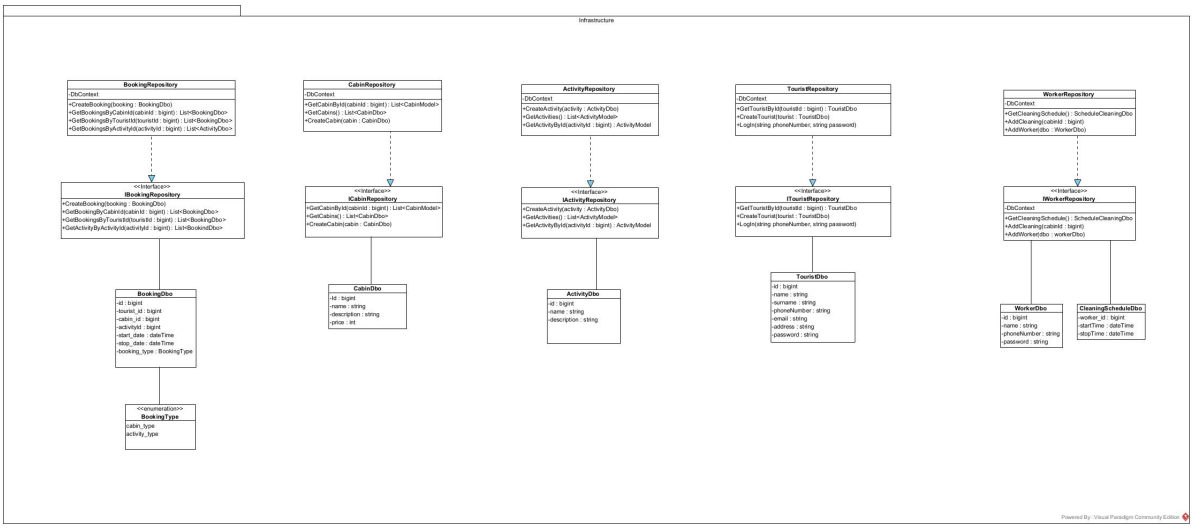
Infrastructure
BookingRepository
-DbContext
+CreateBooking(booking : BookingDbo)
+GetBookingsByCabinId(cabinId : bigint) : List<BookingDbo>
+GetBookingsByTouristId(touristId : bigint) : List<BookingDbo>
+GetBookingsByActivityId(activityId : bigint) : List<ActivityDbo>
CabinRepository
-DbContext
+GetCabinById(cabinId : bigint) : List<CabinModel>
+GetCabins() : List<CabinDbo>
+CreateCabin(cabin : CabinDbo)
ActivityRepository
-DbContext
+CreateActivity(activity : ActivityDbo)
+GetActivities() : List<ActivityModel>
+GetActivityById(activityId : bigint) : ActivityModel
TouristRepository
-DbContext
+GetTouristById(touristId : bigint) : TouristDbo
+CreateTourist(tourist : TouristDbo)
+Login(string phoneNumber, string password)
WorkerRepository
-DbContext
+GetCleaningSchedule() : ScheduleCleaningDbo
+AddCleaning(cabinId : bigint)
+AddWorker(dbo : WorkerDbo)
<<Interface>>
IBookingRepository
+CreateBooking(booking : BookingDbo)
+GetBookingByCabinId(cabinId : bigint) : List<BookingDbo>
+GetBookingsByTouristId(touristId : bigint) : List<BookingDbo>
+GetActivityByActivityId(activityId : bigint) : List<BookindDbo>
<<Interface>>
ICabinRepository
+GetCabinById(cabinId : bigint) : List<CabinModel>
+GetCabins() : List<CabinDbo>
+CreateCabin(cabin : CabinDbo)
<<Interface>>
IActivityRepository
+CreateActivity(activity : ActivityDbo)
+GetActivities() : List<ActivityModel>
+GetActivityById(activityId : bigint) : ActivityModel
<<Interface>>
ITouristRepository
+GetTouristById(touristId : bigint) : TouristDbo
+CreateTourist(tourist : TouristDbo)
+Login(string phoneNumber, string password)
<<Interface>>
IWorkerRepository
-DbContext
+GetCleaningSchedule() : ScheduleCleaningDbo
+AddCleaning(cabinId : bigint)
+AddWorker(dbo : workerDbo)
BookingDbo
-id : bigint
-tourist_id : bigint
-cabin_id : bigint
-activityId : bigint
-start_date : dateTime
-stop_date : dateTime
-booking_type : BookingType
CabinDbo
-Id : bigint
-name : string
-description : string
-price : int
ActivityDbo
-id : bigint
-name : string
-description : string
TouristDbo
-id : bigint
-name : string
-surname : string
-phoneNumber : string
-email : string
-address : string
-password : string
WorkerDbo
-id : bigint
-name : string
-phoneNumber : string
-password : string
CleaningScheduleDbo
-worker_id : bigint
-startTime : dateTime
-stopTime : dateTime
<<enumeration>>
BookingType
cabin_type
activity_type
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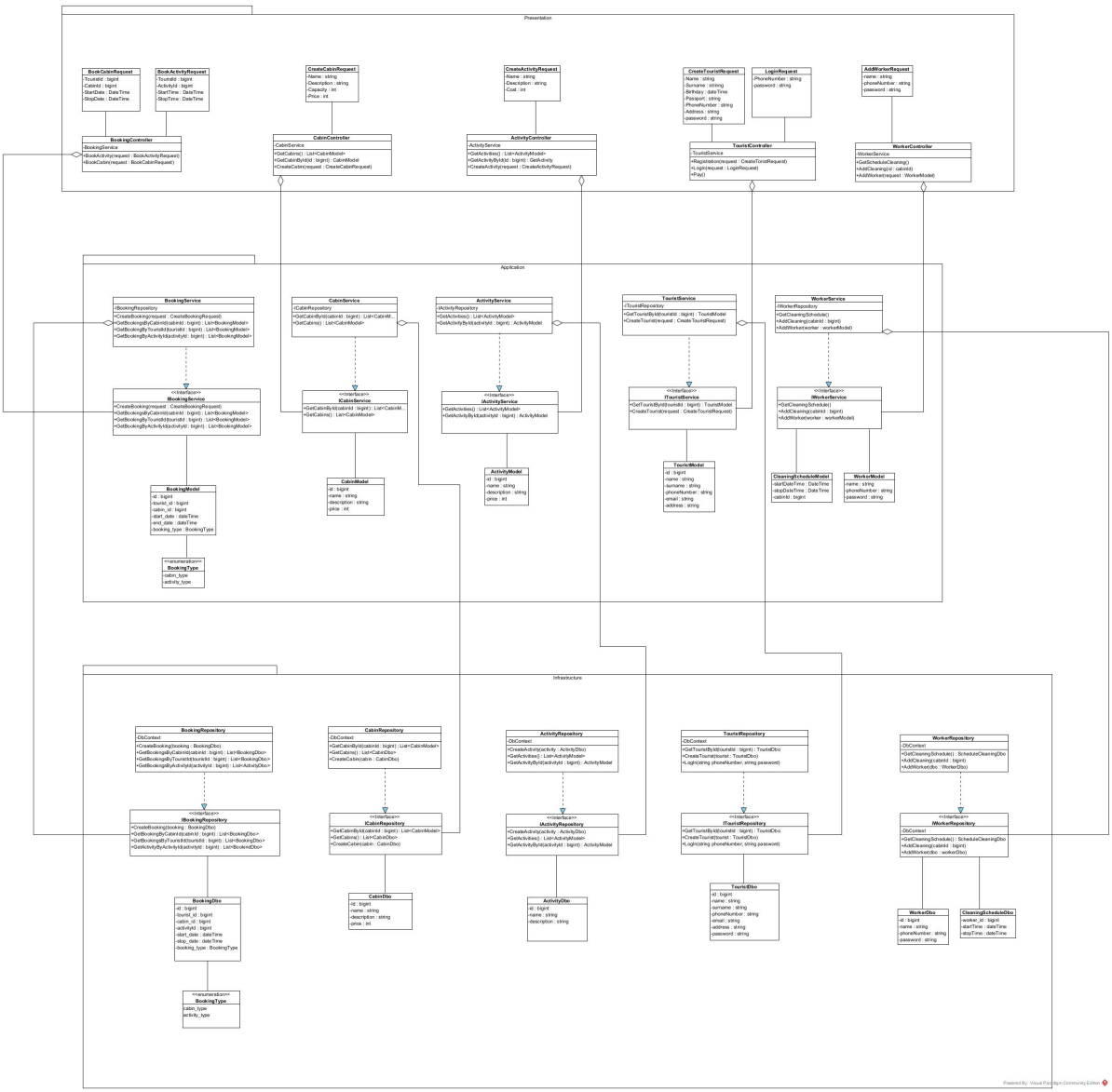
Presentation
BookCabinRequest
-TouristId : bigint
-CabinId : bigint
-StartDate : DateTime
-StopDate : DateTime
BookActivityRequest
-TouristId : bigint
-ActivityId : bigint
-StartTime : DateTime
-StopTime : DateTime
CreateCabinRequest
-Name : string
-Description : string
-Capacity : int
-Price : int
CreateActivityRequest
-Name : string
-Description : string
-Cost : int
CreateTouristRequest
-Name : string
-Surname : string
-Birthday : dateTime
-Passport : string
-PhoneNumber : string
-Address : string
-password : string
LoginRequest
-PhoneNumber : string
-password : string
AddWorkerRequest
-name : string
-phoneNumber : string
-password : string
BookingController
-BookingService
+BookActivity(request : BookActivityRequest)
+BookCabin(request : BookCabinRequest)
CabinController
-CabinService
+GetCabines() : List<CabinModel>
+GetCabinById(id : bigint) : CabinModel
+CreateCabin(request : CreateCabinRequest)
ActivityController
-IActivityService
+GetActivities() : List<ActivityModel>
+GetActivityById(id : bigint) : GetActivity
+CreateActivity(request : CreateActivityRequest)
TouristController
-ITouristService
+Registration(request : CreateTouristRequest)
+Login(request : LoginRequest)
+Pay()
WorkerController
-IWorkerService
+GetScheduleCleaning()
+AddCleaning(id : cabinId)
+AddWorker(request : WorkerModel)
Application
BookingService
-IBookingRepository
+CreateBooking(request : CreateBookingRequest)
+GetBookingsByCabinId(cabinId : bigint) : List<BookingModel>
+GetBookingsByTouristId(touristId : bigint) : List<BookingModel>
+GetBookingsByActivityId(activityId : bigint) : List<BookingModel>
<<Interface>>
IBookingService
+CreateBooking(request : CreateBookingRequest)
+GetBookingsByCabinId(cabinId : bigint) : List<BookingModel>
+GetBookingsByTouristId(touristId : bigint) : List<BookingModel>
+GetBookingsByActivityId(activityId : bigint) : List<BookingModel>
BookingModel
-id : bigint
-tourist_id : bigint
-cabin_id : bigint
-start_date : dateTime
-end_date : dateTime
-booking_type : BookingType
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BookingType
-cabin_type
-activity_type
CabinService
-ICabinRepository
+GetCabinById(cabinId : bigint) : List<CabinM...
+GetCabins() : List<CabinModel>
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ICabinService
+GetCabinById(cabinId : bigint) : List<CabinM...
+GetCabins() : List<CabinModel>
CabinModel
-id : bigint
-name : string
-description : string
-price : int
ActivityService
-IActivityRepository
+GetActivities() : List<ActivityModel>
+GetActivityById(activityId : bigint) : ActivityModel
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IActivityService
+GetActivities() : List<ActivityModel>
+GetActivityById(activityId : bigint) : ActivityModel
ActivityModel
-id : bigint
-name : string
-description : string
-price : int
TouristService
-ITouristRepository
+GetTouristById(touristId : bigint) : TouristModel
+CreateTourist(request : CreateTouristRequest)
<<Interface>>
ITouristService
+GetTouristById(touristId : bigint) : TouristModel
+CreateTourist(request : CreateTouristRequest)
TouristModel
-id : bigint
-name : string
-surname : string
-phoneNumber : string
-email : string
-address : string
WorkerService
-IWorkerRepository
+GetCleaningSchedule()
+AddCleaning(cabinId : bigint)
+AddWorker(worker : workerModel)
<<Interface>>
IWorkerService
+GetCleaningSchedule()
+AddCleaning(cabinId : bigint)
+AddWorker(worker : workerModel)
CleaningScheduleModel
-startDateTime : DateTime
-stopDateTime : DateTime
-cabinId : bigint
WorkerModel
-name : string
-phoneNumber : string
-password : string
Infrastructure
BookingRepository
-DbContext
+CreateBooking(booking : BookingDbo)
+GetBookingsByCabinId(cabinId : bigint) : List<BookingDbo>
+GetBookingsByTouristId(touristId : bigint) : List<BookingDbo>
+GetBookingsByActivityId(activityId : bigint) : List<ActivityDbo>
<<Interface>>
IBookingRepository
+CreateBooking(booking : BookingDbo)
+GetBookingsByCabinId(cabinId : bigint) : List<BookingDbo>
+GetBookingsByTouristId(touristId : bigint) : List<BookingDbo>
+GetActivityByActivityId(activityId : bigint) : List<BookedDbo>
BookingDbo
-id : bigint
-tourist_id : bigint
-cabin_id : bigint
-activityId : bigint
-start_date : dateTime
-stop_date : dateTime
-booking_type : BookingType
<<enumeration>>
BookingType
cabin_type
activity_type
CabinRepository
-DbContext
+GetCabinById(cabinId : bigint) : List<CabinModel>
+GetCabines() : List<CabinDbo>
+CreateCabin(cabin : CabinDbo)
<<Interface>>
ICabinRepository
+GetCabinById(cabinId : bigint) : List<CabinModel>
+GetCabines() : List<CabinDbo>
+CreateCabin(cabin : CabinDbo)
CabinDbo
-id : bigint
-name : string
-description : string
-price : int
ActivityRepository
-DbContext
+CreateActivity(activity : ActivityDbo)
+GetActivities() : List<ActivityModel>
+GetActivityById(activityId : bigint) : ActivityModel
<<Interface>>
IActivityRepository
+CreateActivity(activity : ActivityDbo)
+GetActivities() : List<ActivityModel>
+GetActivityById(activityId : bigint) : ActivityModel
ActivityDbo
-id : bigint
-name : string
-description : string
TouristRepository
-DbContext
+GetTouristById(touristId : bigint) : TouristDbo
+CreateTourist(tourist : TouristDbo)
+Login(string phoneNumber, string password)
<<Interface>>
ITouristRepository
+GetTouristById(touristId : bigint) : TouristDbo
+CreateTourist(tourist : TouristDbo)
+Login(string phoneNumber, string password)
TouristDbo
-id : bigint
-name : string
-surname : string
-phoneNumber : string
-email : string
-address : string
-password : string
WorkerRepository
-DbContext
+GetCleaningSchedule() : ScheduleCleaningDbo
+AddCleaning(cabinId : bigint)
+AddWorker(dbo : WorkerDbo)
<<Interface>>
IWorkerRepository
-DbContext
+GetCleaningSchedule() : ScheduleCleaningDbo
+AddCleaning(cabinId : bigint)
+AddWorker(dbo : workerDbo)
WorkerDbo
-id : bigint
-name : string
-phoneNumber : string
-password : string
CleaningScheduleDbo
-worker_id : bigint
-startTime : dateTime
-stopTime : dateTime
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