



TECHNICAL UNIVERSITY
OF CLUJ-NAPOCA
ROMANIA

Faculty of Automation
and Computer Science

Vacation Booking Application

-Project prepared for the Software Design course-

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2021-2022

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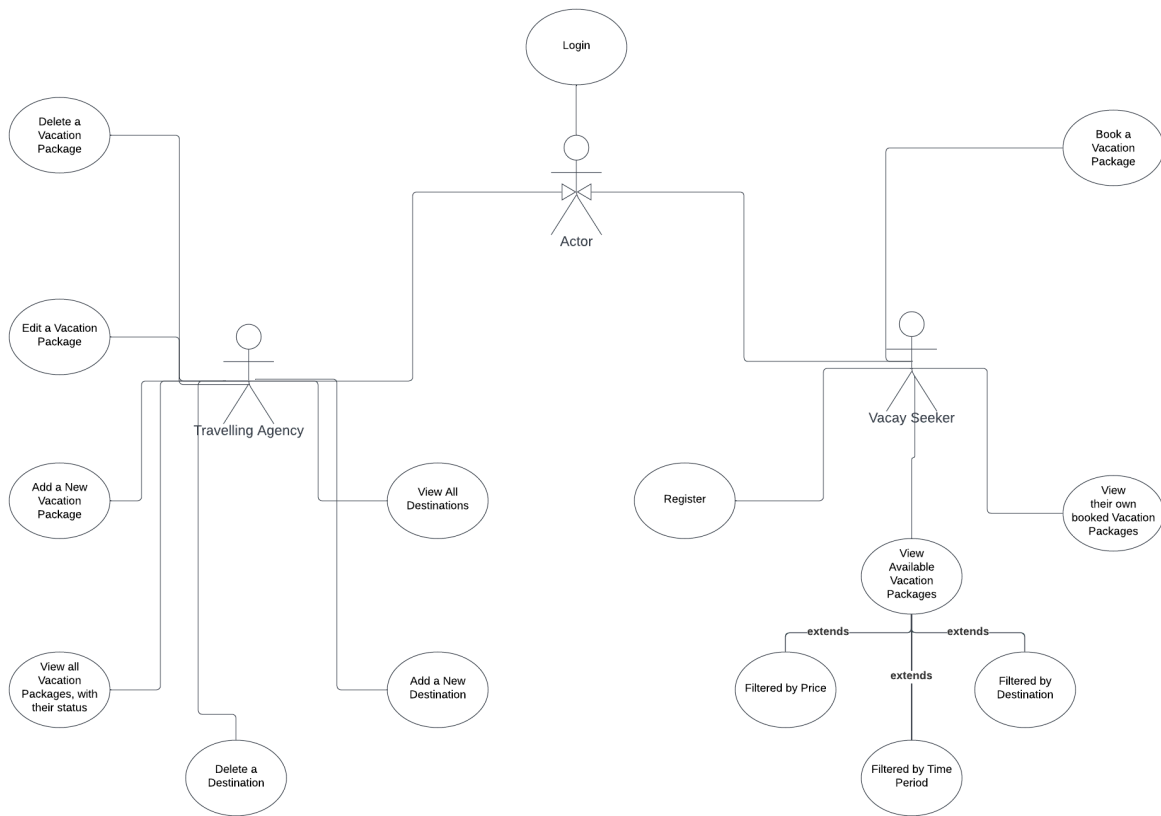
Introduction

Objectives

The primary goal of this project is to implement a desktop application that allows

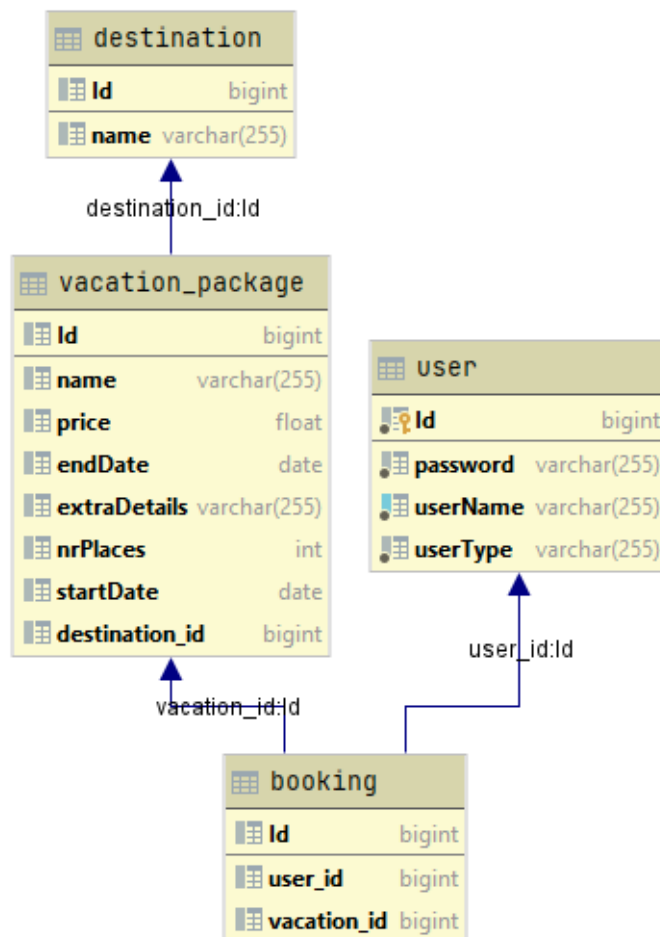
- a travelling agency
 - to manage the data of the
 - destinations
 - the vacation packages offered by the agency
- the “vacay seekers”
 - to view the vacation packages corresponding to their needs
 - book a vacation package.

Use Cases



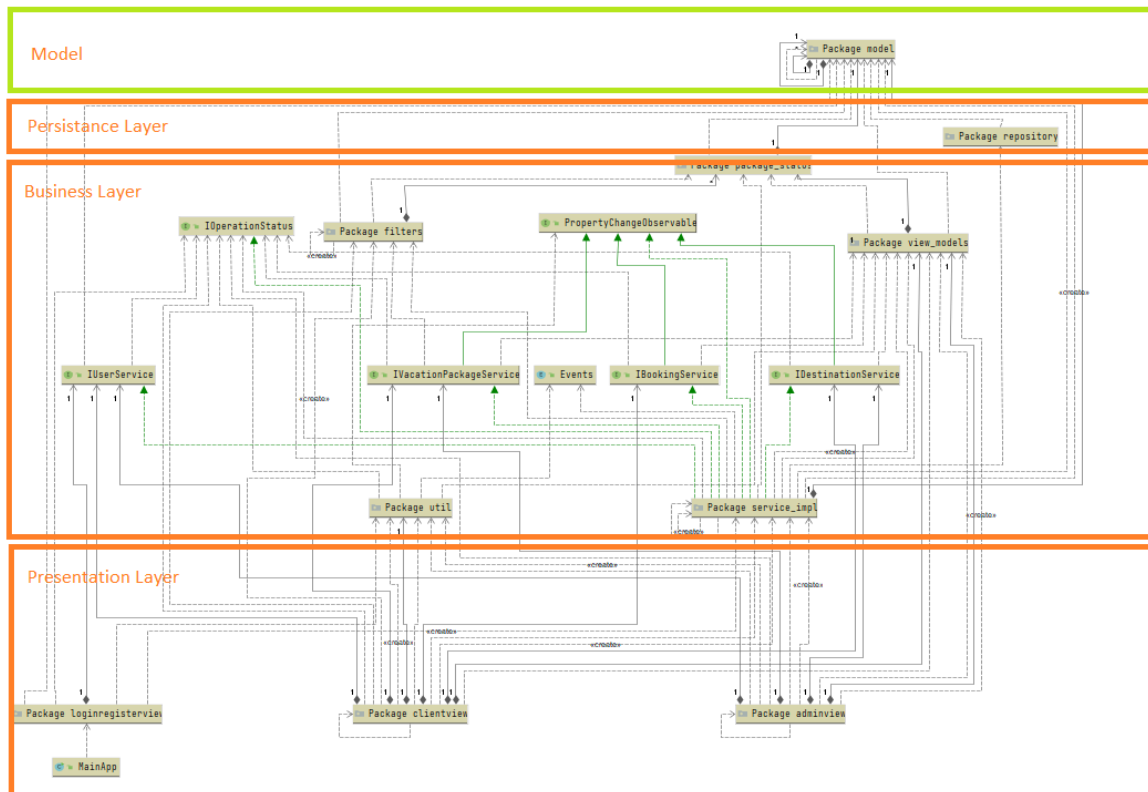
Implementation

Database Design

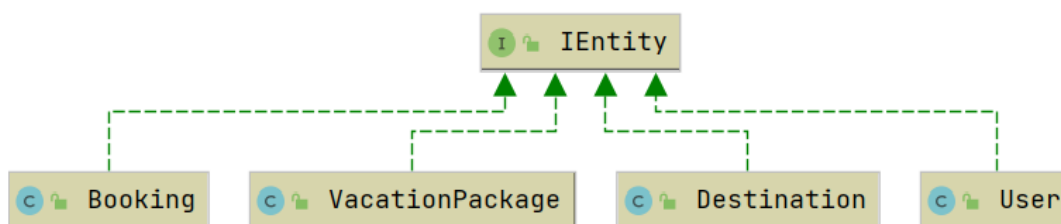


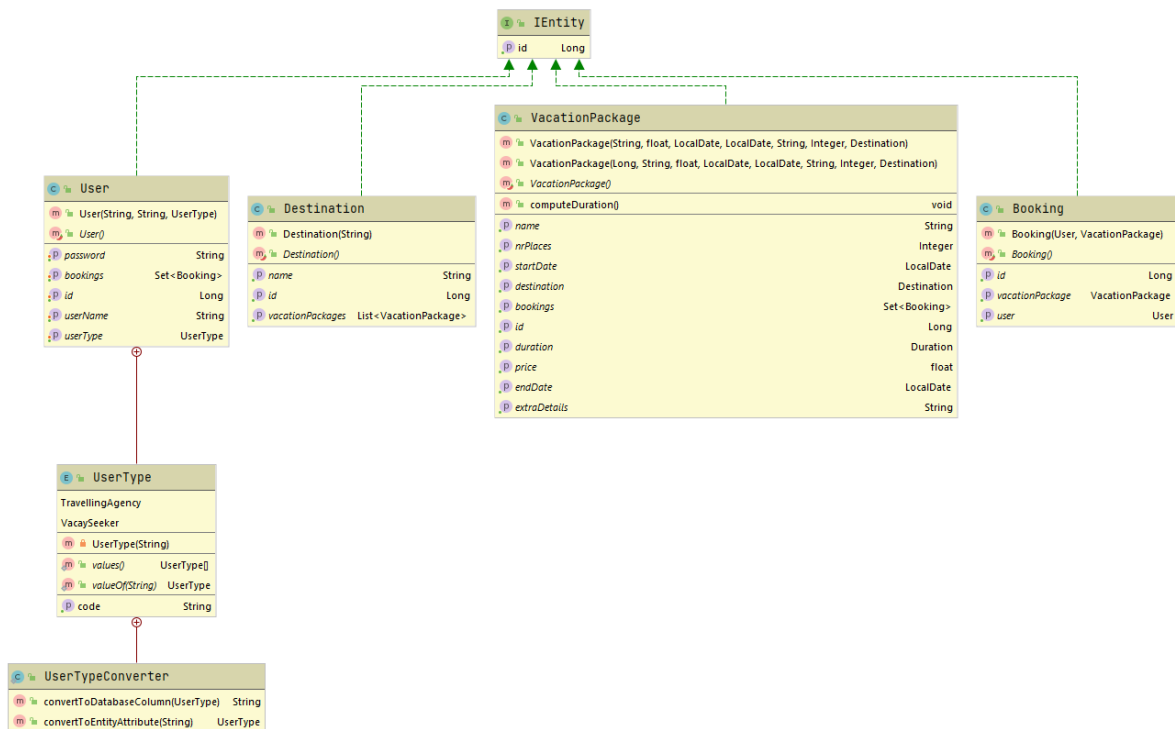
Software Design

Layered Architecture

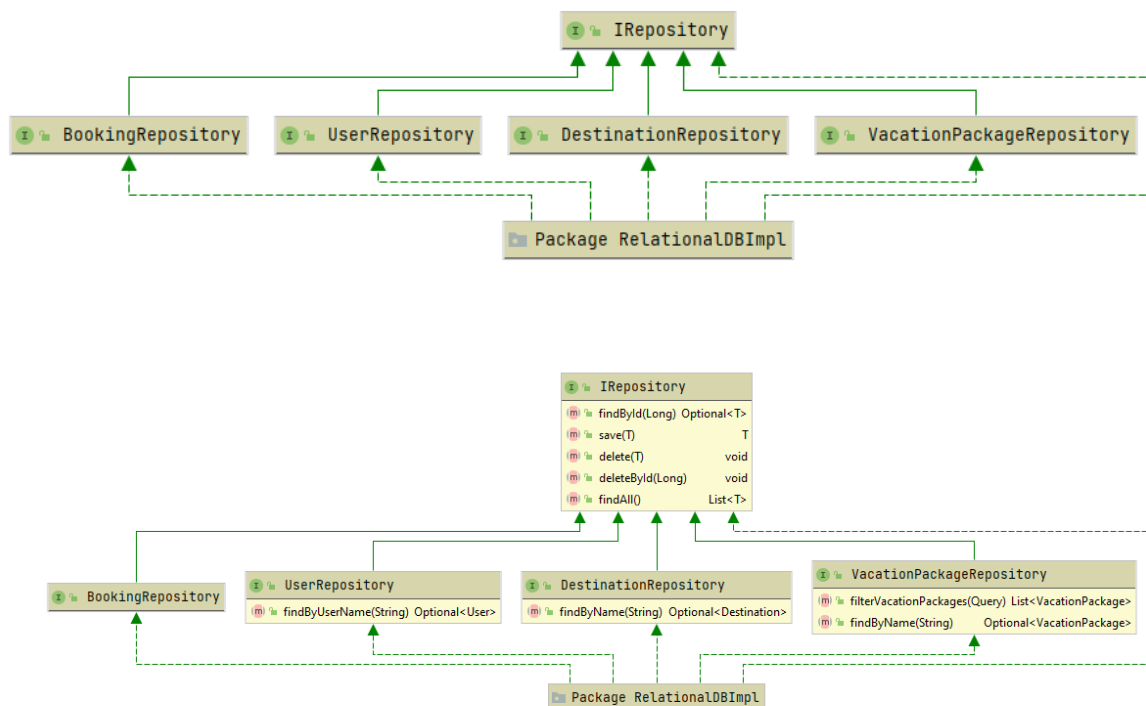


Model

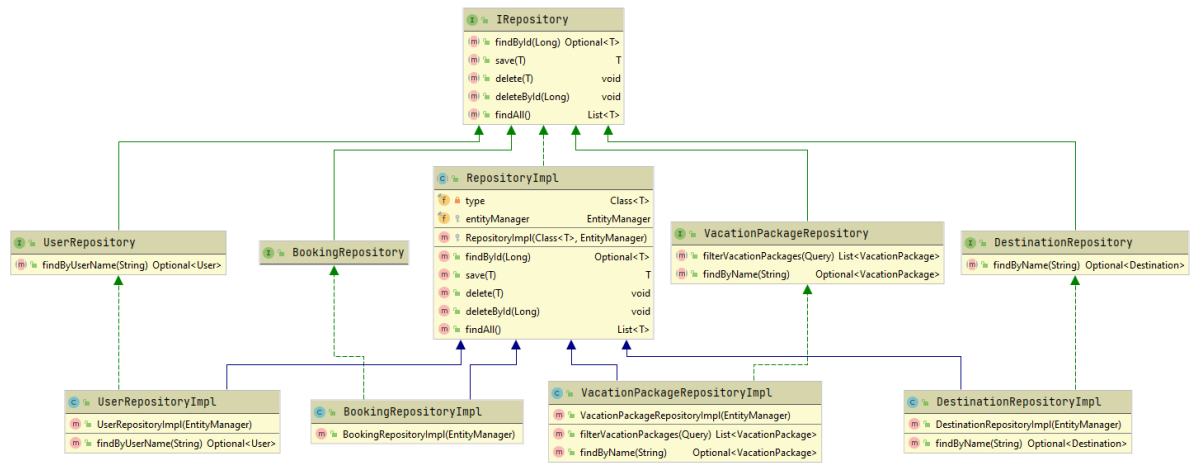




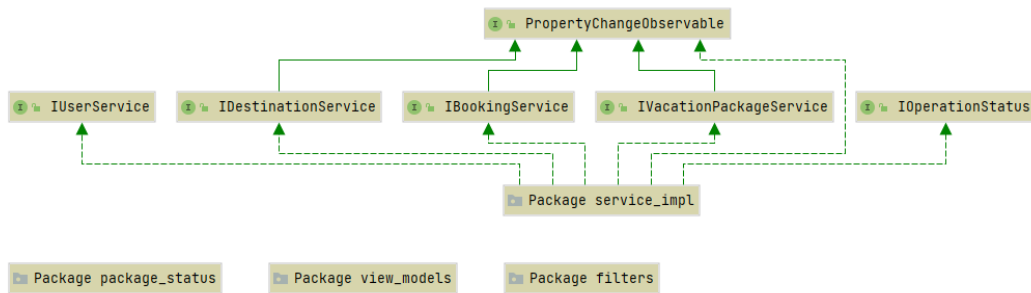
Data Access Layer



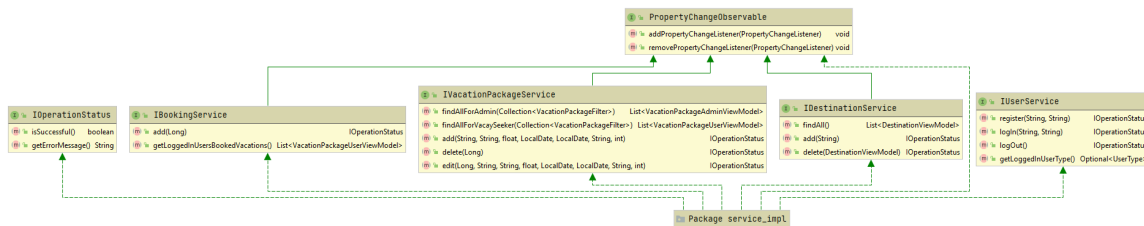
With implementations:



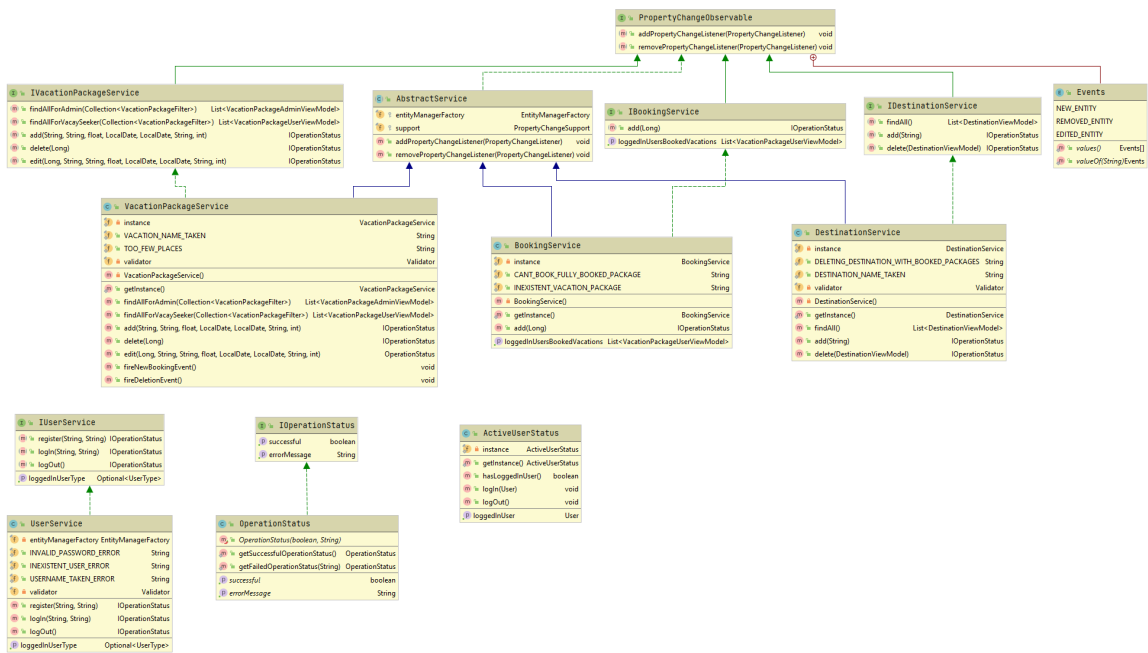
Business Layer



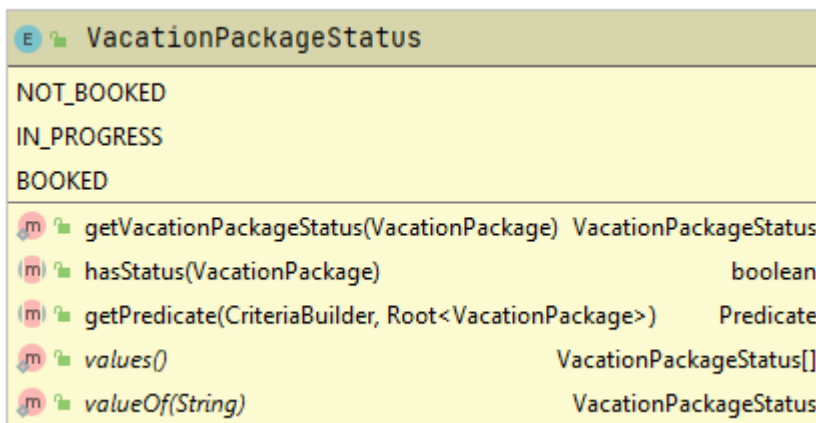
The interface



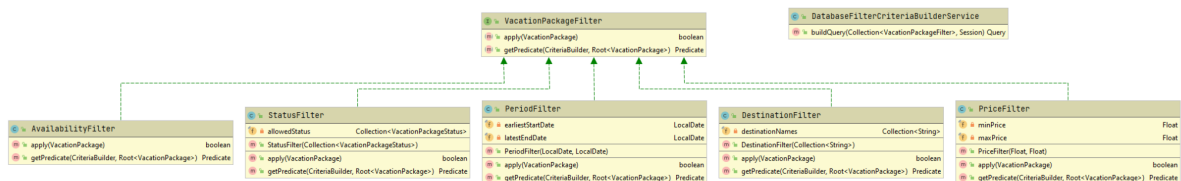
With implementations:



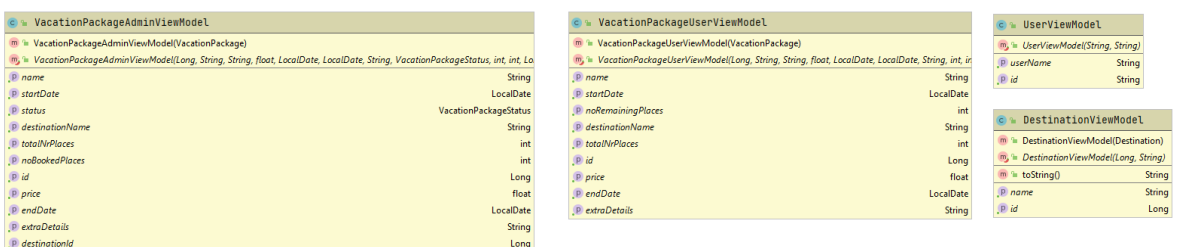
Logic for the status of vacation packages:



Logic for filtering vacation packages:



ViewModels for communication with the presentation layer:



Presentation Layer

Package loginregisterview

Package clientview

Package adminview

Package util

Login, Registration

LoginPaneController		
f	userNameTextField	TextField
f	passwordField	TextField
f	userService	IUserService
m	onLoginButtonClicked()	void
m	onRegisterButtonClicked()	void
m	loadMainStage(UserType)	void
m	getMainPanePath(UserType)	String

RegisterPaneController		
f	userNameTextField	TextField
f	passwordField	PasswordField
f	userService	IUserService
m	onRegisterButtonClicked()	void

Vacay seeker's view

VacationBookingController		
f	maxPriceTextField	TextField
f	minPriceTextField	TextField
f	endDatePicker	DatePicker
f	startDatePicker	DatePicker
f	destinationComboBox	ComboBox<DestinationViewModel>
f	vacationsTable	TableView<VacationPackageUserViewModel>
f	BOOK_TEXT	String
f	vacationPackageService	IVacationPackageService
f	bookingService	IBookingService
f	destinationsService	IDestinationService
f	tableController	TableController<VacationPackageUserViewModel>
m	initialize()	void
m	onFilterPackagesButtonClicked(ActionEvent)	void
m	getAppliedFilters()	List<VacationPackageFilter>
m	setupBookVacationButtonColumn()	void
m	onBook(VacationPackageUserViewModel)	void
m	alignCenter(TableColumn)	void

ClientPaneController		
f	userService	IUserService
f	logoutButton	Button
f	bookingsTab	Tab
f	vacationPackagesTab	Tab
m	initialize()	void
m	onLogoutButtonClicked()	void
m	loadLoginStage()	void
m	setupVacationManagementTab()	void
m	setupBookingsTab()	void

ClientBookingsPaneController		
f	bookingsTable	TableView<VacationPackageUserViewModel>
f	bookingService	IBookingService
m	initialize()	void
m	alignCenter(TableColumn)	void

Travelling Agency's view

VacationManagementController		
f	vacationsTable	TableView<VacationPackageAdminViewModel>
f	newVacationButton	Button
f	DELETE_TEXT	String
f	EDIT_TEXT	String
f	vacationPackageService	IVacationPackageService
m	initialize()	void
m	onNewVacationButtonClicked(ActionEvent)	void
m	setupDeleteButtonColumn()	void
m	setupEditButtonColumn()	void
m	onDelete(VacationPackageAdminViewModel)	void
m	onEdit(VacationPackageAdminViewModel)	void
m	alignCenter(TableColumn)	void

AddVacationPackageController		
f	extraDetailsTextArea	TextArea
f	destinationChoiceBox	ChoiceBox<DestinationViewModel>
f	nameTextField	TextField
f	priceTextField	TextField
f	startDatePicker	DatePicker
f	endDatePicker	DatePicker
f	nrPlacesTextField	TextField
f	createButton	Button
f	vacationPackageService	IVacationPackageService
f	destinationsService	IDestinationService
m	initialize()	void
m	onAddButtonClicked(ActionEvent)	void

EditVacationPackageController		
f	extraDetailsTextArea	TextArea
f	destinationComboBox	ComboBox<DestinationViewModel>
f	nameTextField	TextField
f	priceTextField	TextField
f	startDatePicker	DatePicker
f	endDatePicker	DatePicker
f	nrPlacesTextField	TextField
f	editButton	Button
f	vacationPackageService	IVacationPackageService
f	destinationsService	IDestinationService
f	vacationPackageAdminViewModel	VacationPackageAdminViewModel
m	initialize()	void
m	initVacationPackage(VacationPackageAdminViewModel)	void
m	onEditButtonClicked(ActionEvent)	void
m	fillInputs()	void
m	closeStage()	void

AdminPaneController		
f	userService	IUserService
f	destinationsTab	Tab
f	logoutButton	Button
f	bookingsTab	Tab
f	vacationPackagesTab	Tab
m	initialize()	void
m	onLogoutButtonClicked()	void
m	loadLoginStage()	void
m	setupDestinationManagementTab()	void
m	setupVacationManagementTab()	void

DestinationsManagementController		
f	destinationsTable	TableView<DestinationViewModel>
f	DELETE_TEXT	String
f	destinationsService	IDestinationService
m	initialize()	void
m	onNewDestinationButtonClicked(ActionEvent)	void
m	setupDeleteButtonColumn()	void
m	onDelete(DestinationViewModel)	void
m	alignCenter(TableColumn)	void

AddDestinationController		
f	nameTextField	TextField
f	destinationsService	IDestinationService
m	onAddButtonClicked(ActionEvent)	void