

Project Report

Vehicle System

SDV601

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Progress Report One

Wireframe

Error Prompt 1: Vehicle activity removal confirmation

Are you sure you want to delete this entry?

Yes **No**

1.0 1.1

1.0 **Yes confirmation button** – This button will delete the selected vehicle activity and return the user to the main form.

1.1 **No confirmation button** – This button will not delete the selected vehicle activity and return user to the view vehicle form.

Error Prompt 2: Vehicle removal confirmation

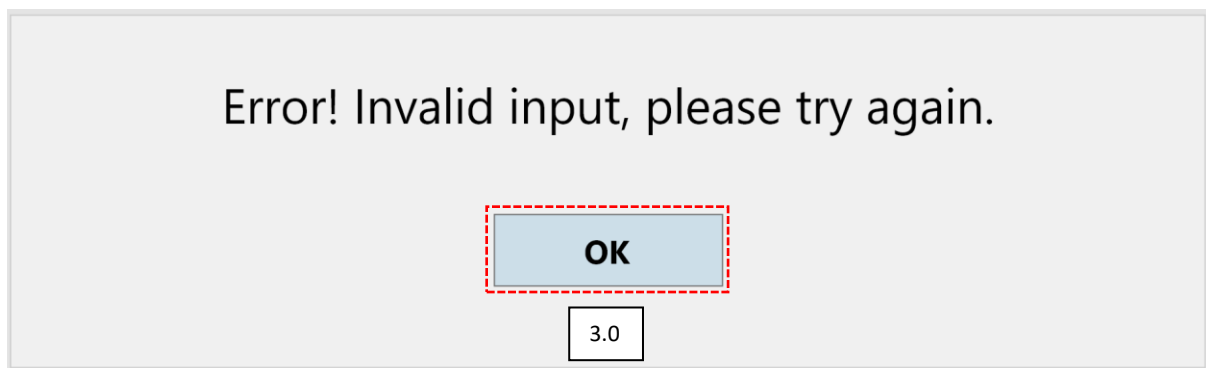
Are you sure you want to delete this vehicle?

Yes **No**

2.0 2.1

2.0 **Yes confirmation button** – This button will delete the selected vehicle and return the user to the main form.

2.1 **No confirmation button** – This button will not delete the selected vehicle and returns the user to the view vehicle form.

Error Prompt 3: Invalid input

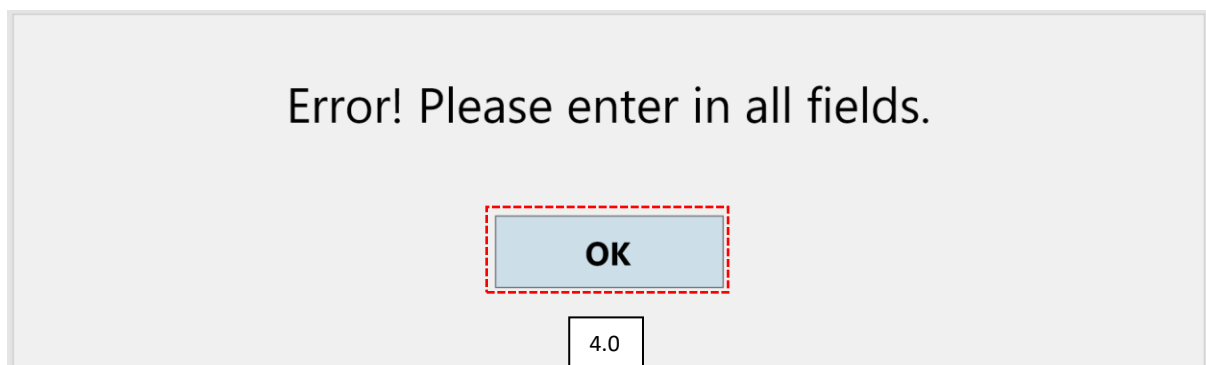
Error! Invalid input, please try again.

OK

3.0

This diagram shows a light gray rectangular box representing an error prompt. Inside the box, the text "Error! Invalid input, please try again." is centered at the top. Below the text, there is a light blue rectangular button with the text "OK" in black. The button is outlined with a dashed red border. Below the button, there is a small white rectangular box containing the text "3.0".

3.0 **Confirmation button** – This button closes the prompt and returns the user to the form.

Error Prompt 4: Empty fields

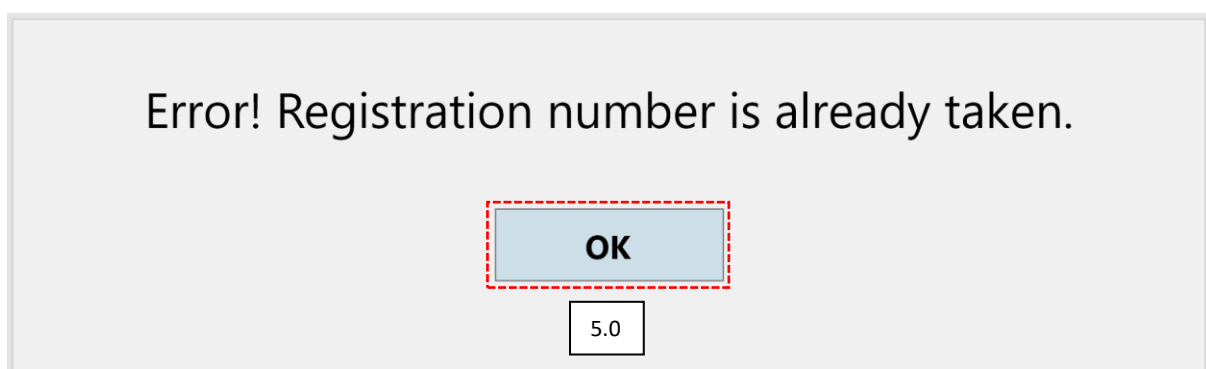
Error! Please enter in all fields.

OK

4.0

This diagram shows a light gray rectangular box representing an error prompt. Inside the box, the text "Error! Please enter in all fields." is centered at the top. Below the text, there is a light blue rectangular button with the text "OK" in black. The button is outlined with a dashed red border. Below the button, there is a small white rectangular box containing the text "4.0".

4.0 **Confirmation button** – This button closes the prompt and returns the user to the form.

Error Prompt 5: Taken registration number

Error! Registration number is already taken.

OK

5.0

This diagram shows a light gray rectangular box representing an error prompt. Inside the box, the text "Error! Registration number is already taken." is centered at the top. Below the text, there is a light blue rectangular button with the text "OK" in black. The button is outlined with a dashed red border. Below the button, there is a small white rectangular box containing the text "5.0".

5.0 **Confirmation button** – This button closes the prompt and returns the user to the form.

Application Mock-up

5

MainForm

Rego	Make	Model	Year	Daily Charge
ABC123	Honda	Civic	1999	\$199
ABC123				
ABC123				
ABC123				
ABC123				
ABC123				
ABC123				

Fleet Cash-Flow: \$1990

AddVehicle

Registration:

Make:

Model:

Year:

Daily Charge: \$

Confirmation prompt
will be displayed
(explained above).

Radio buttons, only one
can be activated, when
pressed it sorts the
activities by either
name or date.

ViewVehicle

Registration:

Make:

Model:

Year:

Daily Charge: \$

Date	Name	Type	Cost
19/3/2021	Regular Service	Service	\$199
19/3/2021	Customer Hire	Hire	\$299
19/3/2021	Vehicle Relocation	Relocation	\$599

☐ Sort By: Date
☐ Sort By: Name

Vehicle Cash-Flow: \$9999

ViewRelocationActivity

Relocation Activity - ABC123

Date:

Activity Name:

Start Location:

End Location:

Distance (km):

Cost:

Date fields using a
Date/Time picker.

One add vehicle activity form
will be shown and vary
depending on which activity
type is selected.

One edit vehicle activity form
will be shown and vary
depending on which activity
type is selected.

ViewHiringActivity

Hiring Activity - ABC123

Date:

Activity Name:

Customer Name:

Start Hire Date:

End Hire Date:

AddHiringActivity

Hiring Activity - ABC123

Date:

Activity Name:

Customer Name:

Start Hire Date:

End Hire Date:

AddRelocationActivity

Relocation Activity - ABC123

Date:

Activity Name:

Start Location:

End Location:

Distance (km):

Cost:

AddServiceActivity

Service Activity - ABC123

Date:

Activity Name:

Workshop:

Cost: \$

Description:

ViewServiceActivity

Service Activity - ABC123

Date:

Activity Name:

Workshop:

Cost: \$

Description:

ComboBox that
selects specific activity
type

Confirmation prompt
will be displayed
(explained above).

Use-Cases

Use-case priority

Below are the use-cases for this system ordered by its priority.

Priority	Use-Case	Reason
1	Edit Vehicle	This use case is responsible for editing/maintaining a vehicle record. This is an important use-case as it allows users to edit vehicle details that have been created. This minimises miscommunication and input errors, allowing users to correct mistakes.
2	Edit Activity	This use case is responsible for editing activities created for vehicles. This is an important use-case as it allows users to edit activities that have been created. This minimises miscommunication and input errors, allowing users to correct mistakes.
3	Add Vehicle	This use-case is responsible for creating a vehicle and adding it to the vehicle list. This is an important use-case as other use-cases rely on this use-case to function and work as intended. The whole application would not work if a vehicle cannot be created.
4	New Activity	This use case is responsible for creating vehicle activities and adding them to an activity log. This is an important use-case as it allows users to create activities for vehicles that have been created. Without this use-case, users would not be able to create activity logs for each vehicle.
5	Quick View	This use case is responsible for allowing users to quickly view vehicle details efficiently. This is an important use case as it maximises the productivity a user can have with the system.
6	Delete Vehicle	This use case is responsible for allowing users to delete vehicles. This is an important use case as it allows users to remove vehicles that are no longer in their fleet. This declutters the system/application as it removes any redundant data that users no longer need to keep.
7	Delete Activity	This use case is responsible for allowing users to delete vehicle activities. This is an important use case as it allows users to remove activities that have been added to the wrong vehicle. This declutters the system/application as it removes any redundant data that users no longer need to keep.
8	Re-Sort Log	This use case is responsible for sorting the vehicle activities log. This makes activities easy to find as they can be resorted based on their date or name.
9	Save	This use case is responsible for saving the work/data created by users in the system. This allows vehicles and activities to be stored, so that when the system is opened again, the data that was previously created/edited can be restored.
10	Retrieve	This use case is responsible for retrieving work/data created by users in the system. This allows vehicles and activities to be retrieved from the system and utilised from when the last edit was made.

Use-case descriptions

Use-Case		Edit Vehicle
Version / Date		1.0 - 11 May 2021
Author		Travis Byrman
Summary		A user edits the details of an existing vehicle
Priority		Medium. Other use cases depend on this.
Dependencies	Includes	
	Included by	Add Vehicle
Actor(s)		Admin staff member/user
Trigger		Selecting "Edit Vehicle" from the vehicle info menu.
Pre-Conditions		The vehicle has been created.
Description		<div>1. User enters new vehicle details.</div> <div>2. System verifies new vehicle details.</div> <div>3. System identifies valid input.</div> <div>4. System notifies user of successful changes.</div>
Extensions/ Exceptions		<div>Cause</div> <div>User has entered invalid vehicle details.</div>
		<div>Action</div> <div>An error message prompts the user of invalid vehicle details and asks the user to try again. The vehicle change is unsuccessful.</div>
		<div></div> <div>The registration number that the user has entered has already been taken.</div>
Illustrations		Screenshots on page 3.
Post-Conditions		The vehicles details have successfully been changed.

Use-Case		Delete Vehicle
Version / Date		1.0 - 1 May 2021
Author		Travis Byrman
Summary		A user deletes a vehicle record.
Priority		Low. Other use cases do not depend on this.
Dependencies	Includes	
	Included by	
Actor(s)		Admin staff member/user

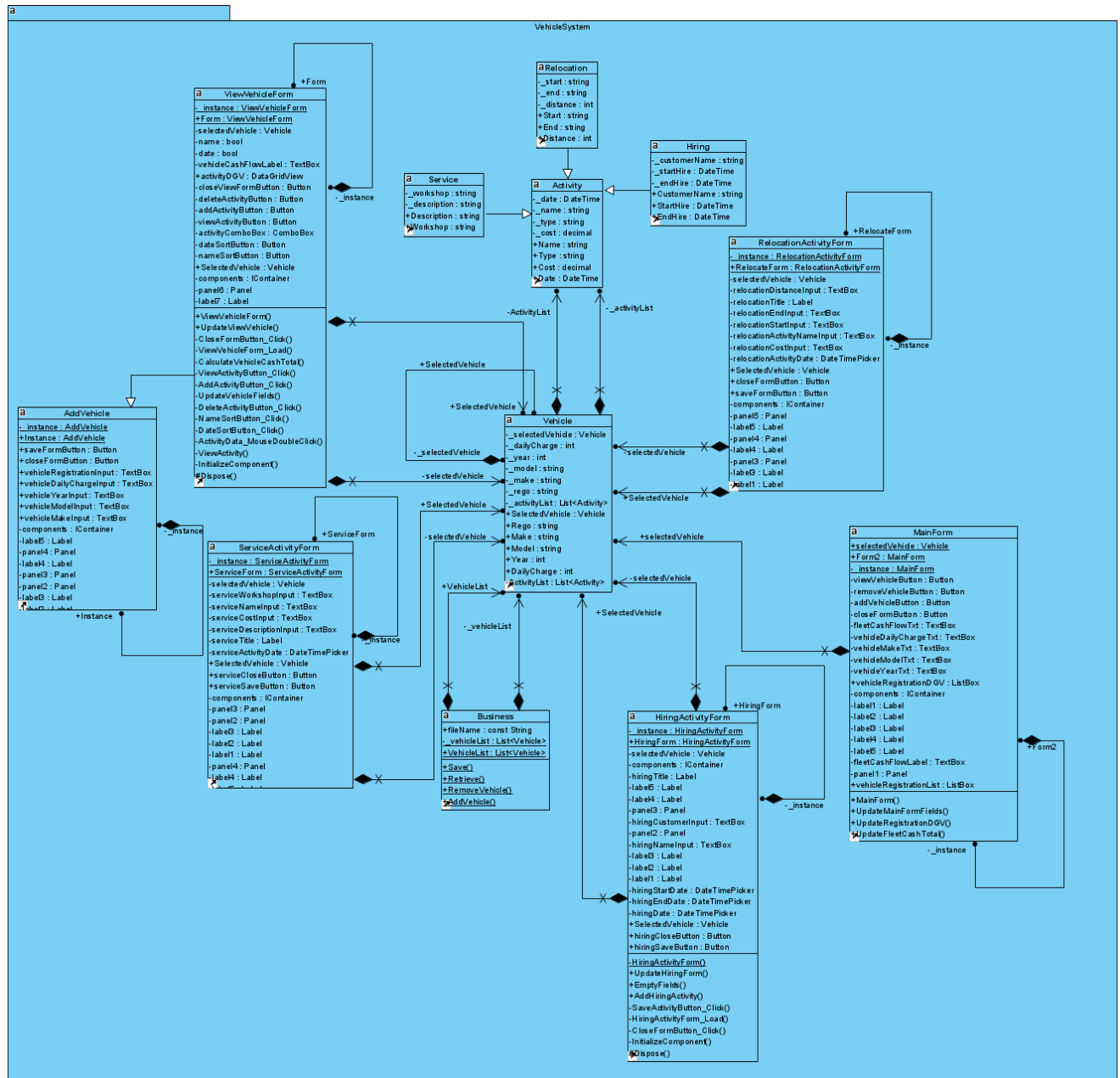
Trigger	Selecting "Remove Vehicle" from the vehicle info menu, after selecting a vehicle from the list in the vehicle info menu.	
Pre-Conditions	The vehicle has been created.	
Description	<ol style="list-style-type: none"> 1. System asks user to confirm action. 2. User confirms action with system. 3. System notifies user of successful record delete. 	
Extensions/ Exceptions	Cause	Action
	User clicks 'No when system asks for confirmation.	The system does not delete the vehicle and returns user to the vehicle info menu.
Illustrations	Screenshots on page 3.	
Post-Conditions	The vehicle is successfully deleted.	

Use-Case		New Activity
Version / Date		1.0 - 11 May 2021
Author		Travis Byrman
Summary		A user creates a new activity.
Priority		High. Other use-case depends on this one.
Dependencies	Includes	Edit Activity
	Included by	Edit Vehicle
Actor(s)		Admin staff member/user
Trigger		Selecting "Add Entry" from the view vehicle menu
Pre-Conditions		The vehicle already exists.
Description		<ol style="list-style-type: none"> 1. User enters new activity details. 2. System verifies new details. 3. System identifies valid input. 4. System notifies user of successful changes.
Extensions/ Exceptions	Cause	Action
	User has entered invalid activity details.	An error message prompts the user of invalid activity details and asks the user to try again. The operation is unsuccessful.

	User has left an input field blank.	An error message prompts user of missing details and asks the user to try again. The operation is unsuccessful.
Illustrations	Screenshots on page 4.	
Post-Conditions	A new activity is successfully created.	

Progress Report Two

Conceptual UML Class Diagram



Package Diagram

