Useful questions to ask

The questions below can be considered inquiries into missing requirements as well as ideas for constructing tests. These are topics that I would try to clarify either before testing or learn as a result of exploring the feature initially.

- Do we have the data needed to perform the tests?
    - Do we have access to use the platform?
- Where is stored the data?
    - Do we have access to the database to see the data?
- Which roles can create, read, update and delete the deals?
- Once the Deal is created, is it possible to edit/delete it?
    - If it is possible to delete the item, does the deletion is logical or physical?
    - If the deletion is logical, is it possible to restore the item?
- How much time do I have to perform the tests?
    - Am I assigned to other tasks?
- Who can I ask my questions about the feature: code, design, business rules, etcetera?

Test Plan (*Deal* feature for Web)

Scope

For the creation of items of the Deals feature, I am going to perform functional tests (UI) doing a manual process. I am going to validate the happy path of the feature and the paths I know are going to display an error (to check if the validations are working properly).

- Feature: Add deal
  - Click on + Deal button (should open the Add deal modal)
  - Fill the form and then click on Save the deal. -
    - Contact Person (mandatory), Organization (mandatory), Title (mandatory), Value, Expected Close Date, Phone and Email fields should be enabled, the user should enter the data (in their own alphabet (Latin, Cyrillic, Greek, Arabic, Armenian, Hebrew, etcetera)) and then he/she should be able to save the item.
  - The deal should appear in the dashboard and I should be able to use it.

I will check the endpoints integrated in the feature and I will check if the data is sent/retrieved to/from the database successfully. Also, I will check if there is no sensitive data displayed in the browser Web Dev console (like passwords, SSN, etcetera).

For the non-functional tests, I am going to check if the design was made according to the wireframes suggested by the UI/UX Design team (if there is a team), talking with them about how the user should interact with the feature (UX tests), also checking if the UI is fully Web responsive.

I forecast 2 weeks of testing, taking into consideration the following. -

- Review of the AC with the PO (if there is a PO) to avoid misunderstandings before design, development and testing processes.
- Bugs found during testing execution and their corresponding fixes.
- Automation of the UI and API (although for purposes of this assessment, only the UI will be automated due the deadline).
- Changes requested by the customer. Since I am testing in a demo environment (for purposes of this assessment), may be changes requested, fixes or removal of existing sub-functionalities that may affect my testing process.

A small regression testing will be performed to check if the feature does not break the existing tests.

Assumptions

- Feature is ready and deployed in demo environment (https://testing65.pipedrive.com/).
- Unit tests. -
  - Prior review with the Development team, the unit tests were made according to the AC, having other unit tests that covered edge cases.
  - Unit tests have passed in the development environment, monitored by the Testing team (or the team/person in charge of that).
- Demo. -
  - There was a walkthrough through the app for the Testing team guided by the developer(s) who worked on the feature, and there was a double check with the PO, before to starting the testing process.
- Design was made according to the wireframes.
  - The UI, developed by the Development team, and UX were checked with the UI/UX Design team, with the suggestions talked before to test.
- The Development team and the PO gave a brief walkthrough to the Testing team through the app to check what was made and if the feature met the requirements.

Risks

- Demo environment could be down during testing and may delay the testing process.
- New bugs found during the execution may delay the execution of the tests proposed (manual and automation).
  - Fields and buttons in the form are not enabled to interact with them.
  - Fields in the form do not accept special characters.
  - The deal is not displayed in the dashboard.
  - The deal is not saved or it comes with missing data.
    - APIs are not sending/retrieving the data to the database/UI.
  - The feature was not designed according to the wireframe or is not Web responsive.
  - The UX is not intuitive.
- Time too short for testing the feature due to new bugs found, changes requested, deadlines, etcetera.
- Third party libraries for testing process may be broken or have unexpected results.
- Extraordinary events, such as vacations, illnesses, pandemics, deaths, PTOs, holidays, etcetera.
- Lack of/Ambiguous requirements to start the testing process.
- This one was found during the creation of the automation framework. - ChromeDriver is not working, and for this reason I used GeckoDriver for Mozilla Firefox. There is an open issue that you may check here: https://bugs.chromium.org/p/chromedriver/issues/detail?id=4121.

Strategy

For the Deals feature, I am going to explore it by checking if the happy path works as expected. The happy path means that the form saves a deal with the fields filled mentioned before, with just the mandatory and then with special characters (according to the alphabet used by the user). Also, I will check if there are validations for the form, answering the following questions: What happens if I send the form as empty? Are there special validations for the Value, Expected Close Date and Email fields? Also, I will check what kind of data is sent to the APIs, and their types. Alongside my exploration, I will check if there is no sensitive data displayed in the browser Web Dev Console (passwords, SSN, monetary values, IDs, etcetera).

Based on these, I will create the test cases (see below) that may result from my exploration. Due there is a deadline to deliver this assessment, I will put my focus on the manual and automated testing process of the UI.

On the other hand, for the non-functional test, the first thing I will do is to check if the UX is intuitive to use, from a user perspective, if the feature is fully responsive, and I will measure the time it takes to generate the item.

After this, I will automate some of the below scenarios proposed in the traceability matrix and add them to the regression suite of the project. To do this task, I will use Selenium + C# and data created by my own, and the automation suite will generate a report if a test passes or fails.

Test case traceability matrix

1. FR-001. Add a Deal
   a. TC01. Add a Deal filling all the fields of the form.
   b. TC02. Add a Deal filling just the required fields.
   c. TC03. Add a Deal with special characters.
2. FR-002. Validating error messages at the moment of adding a Deal.
   a. TC04. Attempt to save the form without adding data.
   b. TC05. Attempt to fill the Value field with an invalid value.
   c. TC06. Attempt to fill the Expected Close Date field with an invalid value.
   d. TC07. Attempt to fill the Phone field with an invalid value.
   e. TC08. Attempt to fill the Email field with an invalid value.

	FR-001	FR-002
TC01	x	
TC02	x	
TC03	x	
TC04		x
TC05		x
TC06		x
TC07		x
TC08		x

Product	Pipedrive portal		
Test case Name	Add a Deal filling all the fields of the form.		
Objective	The user should be able to create a new deal successfully		
Details			
Module	*Deals (add)*	**Test Case ID**	*FR-001; TC01*
Owner	*Armando Cifuentes González*	**Date of creation**	*25-06-2022*
Priority	*High*	**Date of review**	*(pending)*

Preconditions	• The user should be registered in the app.
	 • If the user isn't registered, use the following data. -
	     o email: armandocifuentes_007@hotmail.com
	     o password: *MyA******Pass*****		

#	Step	Test data	Expected Result
1	Open the application.		You should be able to see the Login page.
2	Enter the credentials suggested in the Preconditions section. Then click on the Log in button	*See the Preconditions section*	You should be able to see the Deals page
3	Click on + Deal button		The Add Deal modal should appear and the design should look like this.
4	Fill the following fields. - ▪ Contact person ▪ Organization ▪ Title ▪ Value ▪ Expected Close Date ▪ Phone ▪ Email	Use the following data. - ▪ Contact person: Armando Cifuentes González ▪ Organization: Pipedrive ▪ Title: Software Engineer in Test ▪ Value: 60000.00 (Euros) ▪ Expected Close Date:	The user should be able to fill the fields

		25/07/2022 ■ Email: [armandocifuentes 007@hotmail.com](armandocifuentes007@hotmail.com)	
5	Click on Save button		The deal should appear in the dashboard in the Qualified column

Product	Pipedrive portal		
Test case Name	Add a Deal filling just the required fields.		
Objective	The user should be able to create a new deal, with the required fields, successfully		
Details			
Module	Deals (add)	Test Case ID	FR-001; TC02
Owner	Armando Cifuentes González	Date of creation	25-06-2022
Priority	High	Date of review	(pending)

Preconditions	• The user should be registered in the app.
	 • If the user isn't registered, use the following data. -
	     o email: armandocifuentes_007@hotmail.com
	     o password: *MyA******Pass******		

#	Step	Test data	Expected Result
1	Open the application.		You should be able to see the Login page.
2	Enter the credentials suggested in the Preconditions section. Then click on the Log in button	*See the Preconditions section*	You should be able to see the Deals page
3	Click on + Deal button		The Add Deal modal should appear and the design should look like this.
4	Fill the following fields. - ▪ Contact person ▪ Organization ▪ Title	Use the following data. - ▪ Contact person: Armando Cifuentes González ▪ Organization: Pipedrive ▪ Title: Software Engineer in Test	The user should be able to fill the fields
5	Click on Save button		The deal should appear in the dashboard in the Qualified column

Product	Pipedrive portal		
Test case Name	Add a Deal with special characters.		
Objective	The user should be able to create a new deal, using special characters, successfully		
Details			
Module	Deals (add)	Test Case ID	FR-001; TC03
Owner	Armando Cifuentes González	Date of creation	25-06-2022
Priority	High	Date of review	(pending)

Preconditions	• The user should be registered in the app.
	 • If the user isn't registered, use the following data. -
	     o email: armandocifuentes_007@hotmail.com
	     o password: MyA******Pass*****		

#	Step	Test data	Expected Result
1	Open the application.		You should be able to see the Login page.
2	Enter the credentials suggested in the Preconditions section. Then click on the Log in button	See the Preconditions section	You should be able to see the Deals page
3	Click on + Deal button		The Add Deal modal should appear and the design should look like this.
4	Fill the following fields. - ▪ Contact person ▪ Organization ▪ Title ▪ Value ▪ Expected Close Date ▪ Phone ▪ Email	Use the following data. - ▪ Contact person: Володимир Олександрович Зеленський ▪ Organization: 株式会社東芝 ▪ Title: πατριάρχης ▪ Value: 60000.00 (Euros)	The user should be able to fill the fields

		▪ Expected Close Date: 25/07/2022 ▪ Email: armandocifuentes_007@hotmail.com	
5	Click on Save button		The deal should appear in the dashboard in the Qualified column

Product	Pipedrive portal
Test case Name	Attempt to save the form without adding data.
Objective	The user should not be able to create a new deal if he/she doesn't fill the fields.

Details			
Module	Deals (add)	Test Case ID	FR-002; TC04
Owner	Armando Cifuentes González	Date of creation	25-06-2022
Priority	High	Date of review	(pending)

Preconditions	• The user should be registered in the app.
	• If the user isn't registered, use the following data. -
	    ○ email: armandocifuentes_007@hotmail.com
	    ○ password: MyA******Pass*****		

#	Step	Test data	Expected Result
1	Open the application.		You should be able to see the Login page.
2	Enter the credentials suggested in the Preconditions section. Then click on the Log in button	See the Preconditions section	You should be able to see the Deals page
3	Click on + Deal button		The Add Deal modal should appear and the design should look like this.
4	Click on Save button		The error messages appear below the Contact Person, Organization and Title fields.

Product	Pipedrive portal		
Test case Name	Attempt to fill the Value field with an invalid value.		
Objective	The user should not be able to create a new deal if he/she doesn't enter a valid value		
Details			
Module	Deals (add)	Test Case ID	FR-002; TC05
Owner	Armando Cifuentes González	Date of creation	25-06-2022
Priority	High	Date of review	(pending)
Preconditions	• The user should be registered in the app. • If the user isn't registered, use the following data. - ○ email: armandocifuentes_007@hotmail.com ○ password: *MyA******Pass******		
#	**Step**	**Test data**	**Expected Result**
1	Open the application.		You should be able to see the Login page.
2	Enter the credentials suggested in the Preconditions section. Then click on the Log in button	*See the Preconditions section*	You should be able to see the Deals page
3	Click on + Deal button		The Add Deal modal should appear and the design should look like this.
4	Fill the following fields. - ▪ Contact person ▪ Organization ▪ Title ▪ Value	Use the following data. - ▪ Contact person: Armando Cifuentes González ▪ Organizati on: Pipedrive ▪ Title: Software Engineer in Test ▪ Value: 12122,12 1.01	The Please enter a valid number error message should appear below the Value field.

Note. - This test case is not going to pass since the Expected Close Date field accepts formats that are not supported. Review the bug report created before.

Product	Pipedrive portal		
Test case Name	Attempt to fill the Expected Close Date field with an invalid value.		
Objective	The user should not be able to create a new deal if he/she doesn't enter a valid value		
Details			
Module	Deals (add)	Test Case ID	FR-002; TC06
Owner	Armando Cifuentes González	Date of creation	25-06-2022
Priority	High	Date of review	(pending)

Preconditions	• The user should be registered in the app.
	• If the user isn't registered, use the following data. -
	   o email: armandocifuentes_007@hotmail.com
	   o password: MyA******Pass*****		

#	**Step**	**Test data**	**Expected Result**
1	Open the application.		You should be able to see the Login page.
2	Enter the credentials suggested in the Preconditions section. Then click on the Log in button	See the Preconditions section	You should be able to see the Deals page
3	Click on + Deal button		The Add Deal modal should appear and the design should look like this.
4	Fill the following fields. - ▪ Contact person ▪ Organization ▪ Title ▪ Expected Close Date	Use the following data. - ▪ Contact person: Armando Cifuentes González ▪ Organization: Pipedrive ▪ Title: Software Engineer in Test ▪ Expected Close Date: 30/20/0000	The Invalid date format error message should appear below the Date field.

Note. - This test case is not going to pass since the Phone field accepts any kind of string. Review the bug report created before.

Product	Pipedrive portal		
Test case Name	Attempt to fill the Phone field with an invalid value.		
Objective	The user should not be able to create a new deal if he/she doesn't enter a valid value		
Details			
Module	Deals (add)	**Test Case ID**	FR-002; TC07
Owner	Armando Cifuentes González	**Date of creation**	25-06-2022
Priority	High	**Date of review**	(pending)

Preconditions	• The user should be registered in the app.
	• If the user isn't registered, use the following data. -
	    o email: armandocifuentes_007@hotmail.com
	    o password: *MyA******Pass*****		

#	**Step**	**Test data**	**Expected Result**
1	Open the application.		You should be able to see the Login page.
2	Enter the credentials suggested in the Preconditions section. Then click on the Log in button	*See the Preconditions section*	You should be able to see the Deals page
3	Click on + Deal button		The Add Deal modal should appear and the design should look like this.

4	Fill the following fields. -
	
	  ▪ Contact person
	  ▪ Organization
	  ▪ Title
	  ▪ Phone
		Use the following data. -
		
		  ▪ Contact person: Armando Cifuentes González
		  ▪ Organization: Pipedrive
		  ▪ Title: Software Engineer in Test
		  ▪ Phone: arm12r3as
			The Invalid phone format error message should appear below the Phone field.

Product	Pipedrive portal		
Test case Name	Attempt to fill the Email field with an invalid value.		
Objective	The user should not be able to create a new deal if he/she doesn't enter a valid value		
Details			
Module	Deals (add)	**Test Case ID**	FR-002; TC08
Owner	Armando Cifuentes González	**Date of creation**	25-06-2022
Priority	High	**Date of review**	(pending)

Preconditions	• The user should be registered in the app.
	 • If the user isn't registered, use the following data. -
	     o email: armandocifuentes_007@hotmail.com
	     o password: *MyA******Pass*****		

#	Step	Test data	Expected Result
1	Open the application.		You should be able to see the Login page.
2	Enter the credentials suggested in the Preconditions section. Then click on the Log in button	*See the Preconditions section*	You should be able to see the Deals page
3	Click on + Deal button		The Add Deal modal should appear and the design should look like this.
4	Fill the following fields. - ▪ Contact person ▪ Organization ▪ Title ▪ Email	Use the following data. - ▪ Contact person: Armando Cifuentes González ▪ Organization: Pipedrive ▪ Title: Software Engineer in Test ▪ Email: arm12r3as@.mx	The Email is not valid error message should appear below the Phone field.

Glossary. -

- **AC**. *Acceptance Criteria*
- **PO**. *Product Owner.*
- **UI/UX**. *User Interface/User Experience.*
- **FR**. *Functional requirement.*
- **TC**. *Test case.*