

Full Stack Developer Assignment

Name	Philippe Silva		
Date	September 7th, 2021		

This document is just a small explanation of how the user stories were developed and some of the ideas behind of the chosen solution.

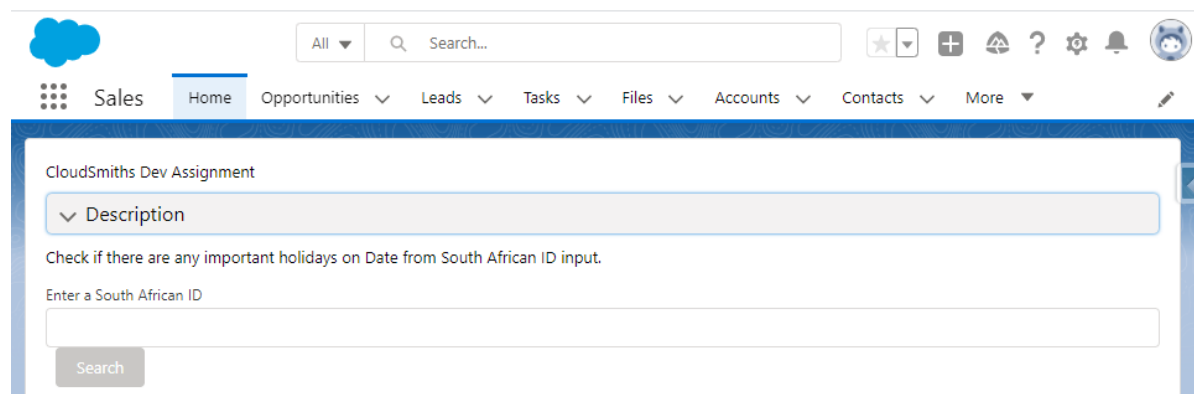
Attached with this document you can find all related code,(HTML,JavaScript, Apex) and the metadata to support the project Data structure.

1. User Story 1

Lightning Web Component to Search for a South African ID number inside Salesforce. This lightning web component can be used in Experience site as External Page.

Section with collapsible description.

Search Button with action. In the picture the button is disabled since there is no valid id in the input field.



The screenshot shows a Salesforce Lightning Web Component interface. At the top, there is a navigation bar with a blue cloud icon, a search bar, and various utility icons. Below the navigation bar, there is a sidebar with a grid icon and a list of tabs: Sales, Home (selected), Opportunities, Leads, Tasks, Files, Accounts, Contacts, and More. The main content area is titled "CloudSmiths Dev Assignment" and contains a collapsible section labeled "Description". Below the description, there is a text input field with the placeholder text "Enter a South African ID". To the right of the input field is a "Search" button, which is currently disabled (grayed out).

2. User Story 2

The screenshot shows a CRM form titled "CloudSmiths Dev Assignment". A red toast notification at the top right says "South African Id Validation Id not valid". The form has a "Description" section with the text "Check if there are any important holidays on Date from South African ID input." Below this is a text input field labeled "Enter a South African ID" containing the value "9 202 204 720 082". A "Search" button is located below the input field.

Toast Notification to inform end user if an Invalid ID was provided. Button will be disabled as long as the Id is invalid.

The screenshot shows the same CRM form as before, but now with a green toast notification at the top right saying "South African Id Validation Id validated". The text input field now contains the value "8 001 015 009 087". The "Search" button is now blue and active.

Toast notification to inform the user that a valid ID was provided. It's possible to use the button after providing a valid ID.

3. User Story 3

The screenshot shows a CRM list view for "South African IDs". The table has columns: "South Africa...", "South African ID Nu...", "Citizenship", "Date of Birth", "Gender", and "Number ...". There are 2 items in the list. Below the table, there is a section for "South African ID Number" with a field name "SouthAfricanIDNumber_c" and a data type "Number(13, 0) (External ID) (Unique)".

	South Africa...	South African ID Nu...	Citizenship	Date of Birth	Gender	Number ...
1	<input type="checkbox"/> SAId-0000	8 001 015 009 087	SA citizen	01/01/80	Male	29
2	<input type="checkbox"/> SAId-0001	2 001 014 800 086	SA citizen	01/01/20	Female	1

South African ID Number
SouthAfricanIDNumber_c
Number(13, 0)
(External ID)
(Unique)

I've created a custom object in Salesforce to store the searches done in the LWC. The component checks if the record for an ID exists, if it doesn't creates a new record with South African Id Number as an external ID. If the Id exists, it only increases the number of queries field to register the search.

4. User Story 4

The screenshot shows a Salesforce Lightning Web Component (LWC) interface. At the top, there's a navigation bar with a blue cloud icon, a search bar, and several icons. Below the navigation bar, there's a tab bar with 'Sales', 'Home', 'Opportunities', 'Leads', 'Tasks', 'Files', 'Accounts', 'South African IDs', and 'More'. The 'Home' tab is selected. The main content area is titled 'CloudSmiths Dev Assignment'. It contains a section with a 'Description' header, a text input field for 'Enter a South African ID' with the value '8001015009087', and a 'Search' button. Below this is a table with 4 columns: 'Holiday Name', 'Description', 'Holiday Date', and 'Holiday Type'. The table lists several holidays, including New Year's Day, Milad un Nabi (Mawlid), March Equinox, Good Friday, Holy Saturday, Easter Sunday, Easter Monday, Isra and Mi'raj, and June Solstice. The 'Good Friday' row is highlighted.

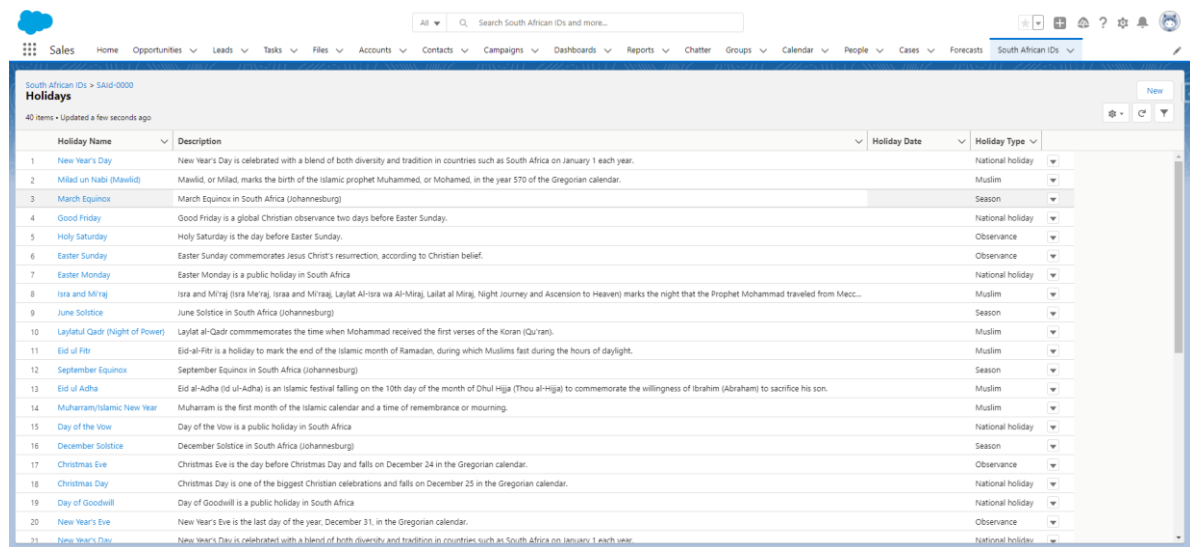
<input type="checkbox"/> Holiday Name	Description	Holiday Date	Holiday Type
<input type="checkbox"/> New Year's Day	New Year's Day is celebrated with a blend of b...		
<input type="checkbox"/> Milad un Nabi (Mawlid)	Mawlid, or Milad, marks the birth of the Islami...		
<input type="checkbox"/> March Equinox	March Equinox in South Africa (Johannesburg)		
<input type="checkbox"/> Good Friday	Good Friday is a global Christian observance t...		
<input type="checkbox"/> Holy Saturday	Holy Saturday is the day before Easter Sunday.		
<input type="checkbox"/> Easter Sunday	Easter Sunday commemorates Jesus Christ's re...		
<input type="checkbox"/> Easter Monday	Easter Monday is a public holiday in South Afri...		
<input type="checkbox"/> Isra and Mi'raj	Isra and Mi'raj (Isra Me'raj, Israa and Mi'raaj, La...		
<input type="checkbox"/> June Solstice	June Solstice in South Africa (Johannesburg)		

Custom table to show the Holidays for the given ID. I've considered just one use case for the years. Since, I only have two numbers to determine the year of birth. The search only works for people with less than 100 years old.

It has 4 columns, but for some reason it has a bug. Probably due to format.

It's returning all holidays for the given year, and it doesn't check for the date of birth.

5. User Story 5



Holiday Name	Description	Holiday Date	Holiday Type
1 New Year's Day	New Year's Day is celebrated with a blend of both diversity and tradition in countries such as South Africa on January 1 each year.		National holiday
2 Milad un Nabi (Mawlid)	Mawlid, or Milad, marks the birth of the Islamic prophet Muhammad, or Mohamed, in the year 570 of the Gregorian calendar.		Muslim
3 March Equinox	March Equinox in South Africa (Johannesburg)		Season
4 Good Friday	Good Friday is a global Christian observance two days before Easter Sunday.		National holiday
5 Holy Saturday	Holy Saturday is the day before Easter Sunday.		Observance
6 Easter Sunday	Easter Sunday commemorates Jesus Christ's resurrection, according to Christian belief.		Observance
7 Easter Monday	Easter Monday is a public holiday in South Africa		National holiday
8 Isra and Miraj	Isra and Miraj (Isra Miraj, Israa and Miraj, Laylat Al-Isra wa Al-Miraj, Lailat al Miraj, Night Journey and Ascension to Heaven) marks the night that the Prophet Mohammad traveled from Mecc...		Muslim
9 June Solstice	June Solstice in South Africa (Johannesburg)		Season
10 Laylatul Qadr (Night of Power)	Laylat al-Qadr commemorates the time when Mohammad received the first verses of the Koran (Qur'an).		Muslim
11 Eid ul-Fitr	Eid-ul-Fitr is a holiday to mark the end of the Islamic month of Ramadan, during which Muslims fast during the hours of daylight.		Muslim
12 September Equinox	September Equinox in South Africa (Johannesburg)		Season
13 Eid al-Adha	Eid al-Adha (Id ul-Adha) is an Islamic festival falling on the 10th day of the month of Dhul Hijja (Thou al-Hijjal) to commemorate the willingness of Ibrahim (Abraham) to sacrifice his son.		Muslim
14 Muharram/Islamic New Year	Muharram is the first month of the Islamic calendar and a time of remembrance or mourning.		Muslim
15 Day of the Vow	Day of the Vow is a public holiday in South Africa		National holiday
16 December Solstice	December Solstice in South Africa (Johannesburg)		Season
17 Christmas Eve	Christmas Eve is the day before Christmas Day and falls on December 24 in the Gregorian calendar.		Observance
18 Christmas Day	Christmas Day is one of the biggest Christian celebrations and falls on December 25 in the Gregorian calendar.		National holiday
19 Day of Goodwill	Day of Goodwill is a public holiday in South Africa		National holiday
20 New Year's Eve	New Year's Eve is the last day of the year, December 31, in the Gregorian calendar.		Observance
21 New Year's Day	New Year's Day is celebrated with a blend of both diversity and tradition in countries such as South Africa on January 1 each year.		National holiday

Holidays were stored in a Master-detail relationship with South African Id, that it was searched. This is a related list inside Salesforce, attached to the Parent Record (Given SA ID). Each search will create more Holiday records, this is not optimized.