**Case Study:**

Let us assume that the below images are part of a Mobile Registration that a user would need to complete it in order for them to register to a certain website or application.

1. Please indicate the process that you would follow in testing these pages.

Answer:

* Test plan – it will ensure that both form pages capture and validate user data correctly and transition smoothly
* RTM – It will show how requirements are implemented, tested, and potentially impacted by changes.
* Test case design – write positive and negative test cases with pre conditions, post conditions and steps
* Test environment setup – test across IOS and Andriod
* Test execution – execute the test cases
* Test report – which will include test progress and defects list
* Retest and regression – retest of failed scenarios and testing to ensure changes didn’t break existing functionality
* Test closure – create a summary report that highlight passed and failed test cases, and recommend go live or further improvements

2) Given the above scenario, how would you go about ensuring maximum compatibility testing coverage is achieved?

* Device coverage – make sure that you complete the registration on both IOS and Apple
* Browser compatibility – test the registration forms on all mobile browsers : chrome, safari and edge
* Network condition testing – make sure simulate slow networks for example when you are still typing on the fields
* Accessibility compatibility – ensure labels and keyboard navigation are accessible.
* Automation – have automation in place to test it out e.g using Appium

3) In addition, please write a minimum of 5 test cases using the Given, When, Then format.

* Mandatory fields validation

Given – the user is on the “Join part 1” page

When – the user clicks “Next” without filling in any mandatory fields

Then – the system should display validation errors for “First Name”,” Surname”, “RSA ID number” and “Primary contact number”

* RSA ID number field format check

Given – the user enters alphabetic characters in the “RSA ID number” field

When – the user attempts to proceed to the next page

Then – an error message should be displayed indicating that the ID number must contain only numeric characters

* Valid submission of part 1

Given – the user enters valid input for all required fields and checks the terms and conditions checkbox

When – the user clicks the next button

Then – the application should successfully navigate the user to join part 2

* Province dropdown validation

Given - the user has successfully entered all valid data on part and is on part 2

When – the user tries to click next without selecting a province

Then – the application should show an error message regarding the validation indicating that the selection is required

* Missing address checkbox logic

Given – the user cannot find their address in the suggestions

When - the user checks the box labeled, “if you can not find your address please check this box”

Then – the application should allow the user to continue without filling the address field.

4) The data for each of the various fields persist down to the data base in their respected tables as displayed below. Please write one query that will display in its output the below details:

-First name

-Surname

-ID number

-Province

-Date of Registration

-Active

|  |  |  |  |
| --- | --- | --- | --- |
| **InvolvePartyID** | **CommunicationID** | **MobileNumber** | **MobileNumberAlt** |
| AA1 | CZX1 | 27786444885 | 27298562312 |
| AA2 | CZX2 | 27895898569 | 27278585659 |
| AA3 | CZX3 | 27784454226 | 27786223535 |

Answer:

Select u.Firstname, u.Surname, i.IDnumber, c.Province, i.[Date created] AS Date of registration, u.Active

From Users u

JOIN Candidate c ON u.CandidateGuide = c.CandidateGuide

JOIN Involvement ON c.CandidateGuide = i.CandidateGuide

5) Assume that the IDnumber field is not persisting down to the data base as expected. Indicate how you would write out a bug report by filling out the template below.

|  |  |
| --- | --- |
| **Summary** | ID number field is not persisting to the database after user registration |
| **Description** | Issue: I have noticed that the ID number field, although captured correctly on the application form and submitted, is not getting saved. This is causing issues on the validation and reporting as the ID number field is missing.  Expected: when the user captures their ID number on the application form it should be updated on the database  Steps: user |
| **Acceptance Criteria** | * The ID number entered by the user should be stored in the correct column in the database * The saved ID number should be retrievable and displayed when querying the user’s record |
| **Task Breakdown** | * Ensure that the ID number field is included in the form submission payload * Ensure the ID number value is correctly mapped and passed to the data layer * Check if the column in the database exists and is correctly named. * Unit test and integration tests to confirm that the field is there and correctly returned * System test the full user flow from form submission to database verification |