Non-Functional Requirements to Test

Below are the non-functional requirements that we believe are appropriate to test given the available time and resources:

Requirement code	Usability component	Description	Metrics to use
NFR-001	Error rate	It must ensure that the user makes the least errors possible when filling out the form. Errors are described as submitting wrong information to the application.	User errors count.
NFR-002	Intuitive	It must be easy and straightforward for the user to fill out the form.	Number of misunderstood actions during the think aloud section.
NFR-003	Satisfactory	The sign-up information fields must be pleasant to the user to use and input their information on.	Answered the information field was pleasant to use count

We decided to evaluate these non-functional requirements because they reflect the main shortcomings the system faced on election day. We want to assess whether errors decrease when users input their CURP into a simple text field compared to other ways of requesting the information. Another important aspect to consider is user satisfaction while registering, as in previous tests, several users expressed dissatisfaction with some registration components. We also aim to ensure that anyone seeing the interface for the first time can understand the steps to follow.

Usability Test

2.1 Scope:

The following components of the citizen registration form will be tested:

- CURP
- Email
- Mobile phone number
- Address location

2.2 Objective:

For each component, three prototypes with different approaches to requesting information from the user will be prepared. Among the three prototypes for each component will be the original method used on election day, January 28. The objective is to assess which prototype best meets the quality attributes selected for testing. They will be evaluated using the metrics defined by the attributes.

2.3 Testing Instruments:

- Maze to measure error count
- Google Forms for satisfaction questionnaires
- Voice recorder to record the session
- Excel to note test results

2.4 User Selection:

The Mérida municipality will be asked to call citizens aged 45 to 55 from any district (preferably from different districts) to participate in testing the aforementioned components. At least five people are expected to try each prototype.

A person who has tried one prototype of a component will not be able to test another prototype of the same component but may test other component prototypes. The intention is for each person to try at least one prototype of each component, so to meet the goal of having at least five people test each prototype, we would need at least 15 people for the test.

2.5 Test Duration:

The test is expected to last between 5 and 10 minutes per person for each prototype, so at worst, the test will last 2.5 hours.

2.6 Testing Procedure:

2.6.1 Pre-conditions for the Test:

Participants will be shown a Google document with a task outlining a scenario to test each component. The scenario will be the same for all prototypes of the component being tested, with the only difference being the prototype's link. The scenarios and tasks are available here: Google Drive Folder.

The test facilitator should have the OBSERVATION ARTIFACT for the component being tested. This artifact will differ for each component.

Observation artifacts for the components can be found here: Google Drive Folder.

Consider also the satisfaction questionnaire that will be administered to each participant after the session. The questionnaire can be found here.

2.6.2 Test Start:

The facilitator will show the participant the Google Doc with the task outlining a test scenario for the prototype being tested. This is where the think-aloud script is used to start the test.

After the prototype test is completed, the recording can be stopped and saved with the participant's name and the prototype tested.

Proceed to test the next prototype of a different component. Once the participant has tested a prototype of each component, the session will be concluded.

2.6.3 Post-Test Process:

Give the user a questionnaire to measure satisfaction with the prototype.

With the data collected from the questionnaires and the recordings, fill in the observation artifacts for each component.