**Test concept:**

**Introduction:**

This application is a leisure application for me to practice my angular skills.

**Test items:**

Ein Bild, das Diagramm, Reihe, Text, Plan enthält.

Automatisch generierte Beschreibung

As per the diagram above, this application contains seven components. Only three will be tested, as the other four are simple components, unworthy to be tested.

Home component: only displays texts, not to be tested

Todo component: allows users to modify a todo list, to be tested

Noting component: allows users to add or remove notes, to be tested

Contact component: contains a non-functional form, not to be tested

Feedbacks component: only displays texts, not to be tested

Registration component: contains a non-functional form, not to be tested

Observable (Admin) component: allows admin to filter and view users, to be tested

**Features to be tested:**

Todo component:

* creation of a todo item
* deletion of a todo item
* rendering of the todo list

Noting component:

* creation of a note
* deletion of a note
* rendering of the notes

Observable component:

* filtering of users
* correct rendering of filtered users
* viewing of individual users

**Features not to be tested:**

* Home component
* Contact component
* Feedback component
* Registration component

**Approach:**

Unit testing: Each component will be tested in isolation using Angular’s testing utilities and Jasmine.

Tools:

* Jasmine and Karma for running tests
* Mocking frameworks to simulate data and isolate components
* Browser developer tools for debugging

**Item pass/fail criteria:**

Pass criteria:

* The functionality works as intended, all assertion succeed
* UI elements render correctly

Fail criteria:

* Any assertion fails
* Errors or exceptions thrown during the test

Severity levels:

* Critical: Application crashes
* Moderate: Functionalities work but with significant issues
* Minor: Cosmetic issues or minor deviations from expected results

**Test Deliverables:**

* Test cases: Detailed descriptions of each test case
* Test scripts: Jasmine test scripts for each tested component
* Reports: Execution reports
* Error logs

**Testing tasks:**

* Setup test environment: Install dependencies (Jasmine, Karma, Angular), configure testing framework (Karma)
* Write tests: Create test cases for each feature of the tested components
* Run tests: Execute tests using Karma and generate reports
* Debug: Analyze failed tests and fix errors
* Regression tests: Rerun tests after fixing bugs

**Environmental needs:**

* Hardware: Any laptop with 4GB+ RAM and 2GHz+ processor
* Software: Windows OS, Visual Studio Code, Node.js, npm
* Tools: Angular CLI for building the application, Jasmine/Karma for testing, any browser for manual testing

**Schedule:**

* Setup test environment 2h
* Write test cases 10h
* Debugging and regression testing 2h