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***The startup has developed a financial application with the following***

***characteristics:***

***● User login and registration***

***● Show the user's account balance.***

***● Block and unblock a user's credit card.***

***Challenge:***

***4. Automation strategy: Propose a strategy to automate the test.***

***scenarios, including the tools and frameworks you would use****.*

**Automation Strategy**

The automation strategy ensures robust test coverage for efficiency and reliability. That is, the tests are comprehensive, efficient and continuously executed, providing constant validation of the quality of the financial application.

**4. Automation Tools**

**According to what has been mentioned, these will be the Automation Tools:**

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| **Tools** | **Processes** |
| 1. Selenium Web Driver | *Usage* : UI Test Automation  *Script Language:* Java / Python  Frameworks: TestNG (Java ), Pytest (Phyton) |
| 1. RestAssured | *Usage* : API Testing  *Script Language:* Java |
| 1. Jenkins | *Usage* : Continuous Integration and Automated Test Execution  *Configuration:* Pipelines to run tests in each build. |
| 1. Allure | *Usage* : Continuous Integration and Automated Test Execution  *Configuration:* Pipelines to run tests in each build. |
| 1. Dockers | *Use* : Creation of consistent environments for executing tests.  *Setting* *Docker Compose to build necessary services.* |

**Implementation Strategy**

The deployment strategy is a detailed plan that describes how automated tests will be deployed and operate in a development or production environment. This strategy ensures that tests run efficiently, continuously, and smoothly.

Phase 1: Initial Configuration.

* *Set up the development environment* : Install and configure mentioned tools.
* *Set up code repository:* Use a version control system like Git and set up a centralized repository.

Phase 2: Development of Test Scripts.

* *UI Testing with Selenium:* Develop scripts for each case
* *API Testing with Rest Assured:*Develop scripts to validate backend response

Phase 3: Continuous Integration.

* *Jenkins configuration:*Create pipelines to automatically run tests on each commit/push.

Configure notifications for failure alerts

Phase 4: Report Generation.

* *Allure Settings:*Integrate with test scripts to generate reports.

Configure Jenkins to publish Allure reports after each run.

Phase 5: Execution and Maintenance.

* *Regular Execution:*Run tests automatically with. Each version of the application

Monitor results and address failures quickly.