QA EXERCISE – RAKA PUTRI AGFIAL

1. Difference between Regression and Re-test

Regression	Re-test
Objective : to check that if there is new code changes or updates do not negatively impact the existing functionalities of the application	Objective : to check if the identified defects are fixed
Carried out to search all previous updates and features of the software to find defects and bugs	Testing specific detected defects and usually after regression testing
It can be automated	It can't be automated
Uses passed test cases	Only for failed test

2. Difference between exploratory and Ad-hoc testing

Exploratory	Ad-hoc testing
Free to use any methodology to check the software.	There are no specific procedure to be followed.
There is no compulsion of prior knowledge (the tester can test software without any knowledge.	The tester should have prior knowledge of the app of software in which they are going to perform Adhoc setting.
suitable for application that are complex and require testing based on user behavior and experience.	Suitable for application that have a short development cycle or require rapid testing.

3. Difference between black box and white box testing

Black Box Testing	White Box Testing
Testing method which the internal structure or design of the item being tested is not known, and only external design and structure are tested.	Testing method which the internal structure or design of the item being tested is known, so the implementation and impact of the code are tested.
Mostly done by software tester.	Mostly done by software developers.
The testing can be initiated based on the requirement specifications document.	This testing is started after a detail design document.
Applicable to the higher levels of testing of software.	Applicable to the lower levels of testing of software.

4. Difference between smoke and sanity testing

Smoke Testing	Sanity Testing
This testing is for ensure that the functionalities of the program is working fine.	This testing is to check the bugs have been fixed after the build.
Subset of acceptance testing.	Subset of regression testing.
Testing is performed by either developer or tester.	Testing is performed by tester.
Scripted	Not Scripted
Smoked testing is performed when new product is built.	Sanity testing is conducted after the completion of regression testing.
Firstly performs on the initial build, smoke testing is done first.	Done on stable builds or for the introduced new features in the software.

1. **Software Testing Life Cycle (STLC)**
   STLC phases :
   1. Requirement analysis
   2. Test planning
   3. Test case design and development
   4. Test environment setup
   5. Test execution
   6. Test cycle closure

   The first step of STLC is **Requirement Analysis**, which has most important role in the testing. At the very beginning, software tester will analyze the requirements from client, which include the details of how the feature will be designed and supported because there is case that the software requirements are high-level business needs. Usually, software requirements include functional and non-functional specification and both of which present opportunities to test and validate. The most important things in this phase are how a software tester can understand what client wants (requirements) and communication with software engineering to clarify what a test should take in that case.

   Ideally, tester will start with the test planning, because this phase should be passed first. In the test planning, the team will ensure that all the requirements can be met with the right documented QA Strategy, resources and effort.

2. **Software Development Life Cycle (SDLC)**
   SDLC phases:
   1. Requirement gathering and analysis
   2. Design
   3. Implementation or coding
   4. Testing

5. Deployment
6. Maintenance

The most important phase is testing (Retesting and Regression testing) because if both of those test are passed, that means there are no more defects. The tester will ensure that software has fulfilled the SRS and also make sure that the software is as per the customer's standard.

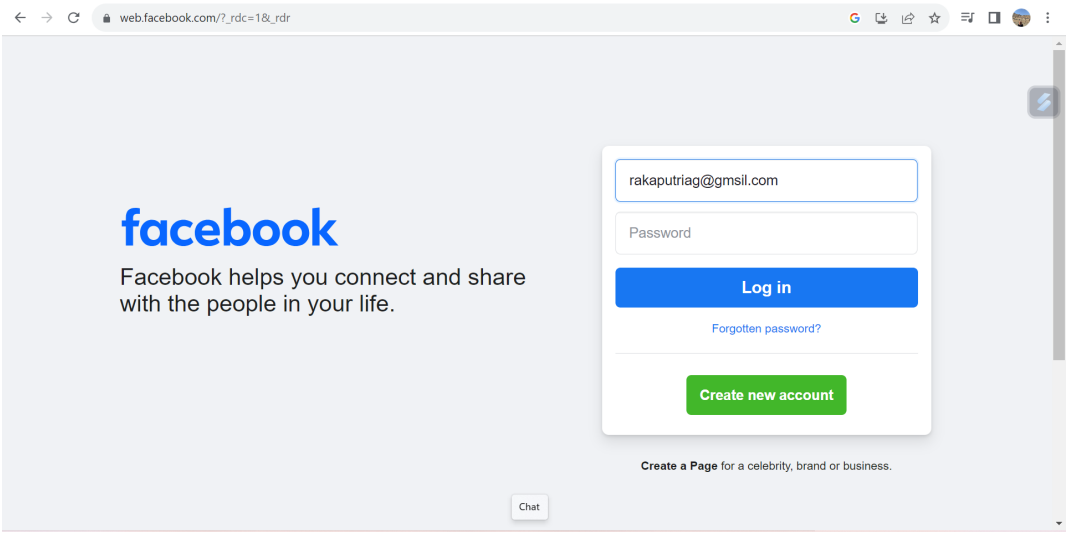
3. **Common or Generic API error**
   - 400 - Bad Request Error
     it occurs when a server can't parse the request itself, this could be caused by an incorrect URL, something wrong with API request or issue within the application itself.
   - 408 - Request Timeout Error
     it occurs when a server doesn't receive a response from the client within a specified amount of time and that the connection has been terminated.
   - 504 - Gateway Timeout Error
     it occurs when a server acts as a proxy and doesn't receive a response from another server upstream within a specified time. This could be
4. **Using exploratory approach,** because the testing can be used for complex and require testing based on user behavior and experience.
5. **Using automation testing**
6. **Using Black Box Testing,** because the testing can be used without the tester knowing the internal structure or design of the item and can test only external design and structure. Also, the testing can be initiated based on the requirement specifications document.
7.
8. **Bug Life Cycle**

   Bug Life Cycle is cycle that the founded defects in software goes through during its lifetime. This cycle is begin when there are defect which founded by the tester and end when the defects are can not be produced again or fixed.

   1. New, there is potential defects founds by the tester and yet to be validated.
   2. Assigned, against a the development team to address it but not yet resolved
   3. Active, defect is being addressed by the developer and investigation is under progress. At this stage there are two possible outcomes (deferred or rejected).
   4. Test, the defect is being fixed and ready for testing.
   5. Verified, the defect that is retested and the test has been verified by QA through testing.
   6. Closed, the final state of the defect that can be closed after the retesting or can be closed if the defect is duplicate or considered as not a defect.
   7. Reopened, if the defect not fixed, QA will reopens the defect.
   8. Deferred, if the defect can not be addressed in that particular cycle it is deferred to future release.
   9. Rejected, defect can be rejected for any of the 3 reasons (duplicate defect, not a defect, non reproducible).

Exercise :

1. Login form



Issue :

a. The textbox for email address or phone number there are no with or without country code (for phone number).
b. There are no suggestion when the user are put the wrong email (i.e., spelling mistake).

2. Valid Login scenario

✔ Login using valid email and valid password.
✔ Login using valid password and valid phone number (using country code).
✔ Login using valid password and valid phone number (without country code).
✔ Clicking on the eye icon to show password.
✔ Copying and pasting the password to notes.

Invalid Log In Scenario

✔ Verify leaving email or phone number field empty.
✔ Verify leaving password field empty.
✔ Verify login with invalid email (not registered).
✔ Verify login using wrong password.
✔ Verify login using invalid phone number.
✔ Verify login 10 times using invalid password.
✔ Verify login using old password.

3. Critical scenarios for travel booking application

✔ Verify that there is an option to add new flights in the system.
✔ Verify that on filling flight details, there are from and to destination, capacity, timings.
✔ Verify that users can search for flights by name, from-to airports or flight code for checking their status and timings.
✔ Verify that search result has flight details, timings and availability.
✔ Verify that there is round trip option.
✔ Verify that when users turn on the roundtrip option, there is return date option.
✔ Verify that after successful fill for the ticket, users able to add hotels .

- ✔ Verify that the date is same duration with the schedule of flight.
- ✔ Verify that the booking confirmation includes all necessary information about the reservation, such as the price, dates, and successfully added in the system.

4. Test scenarios for e-commerce (integration between product details and cart)
   - ✔ Verify that whether the Add to Cart icon is seen on the product detail page.
   - ✔ Verify whether the page redirects to the product details page when clicking on the product in the shopping cart.
   - ✔ Verify whether the shopping cart contains the price of the product, there is name and link to the product details.
   - ✔ Verify that the product should be successfully added to the cart and displayed on cart.
   - ✔ Verify that user can change quantity of the product.
   - ✔ Verify that user can add a text for all products.
   - ✔ Verify that user can delete items from the shopping cart and deleted items should not proceed for further payment.
   - ✔ Verify that shopping cart contains the price of the product and same as the product detail in the product detail page.
   - ✔ Verify that there is an option back to product detail so user can add or modify cart content if needed.
   - ✔ Verify that whether the product retains in the shopping when the user opens two tabs, tabs, one product details page and one shopping cart page, when the user adds a product from the Product detail page, the shopping cart page should get auto refreshed and the new product should appear in the Shopping Cart.

5. Test scenarios for payment gateway
   - ✔ Verify that the gateway, which is used to transfer payments are HTTPS Secured.
   - ✔ Verify that application or websites are encrypted.
   - ✔ Verify that if any field that necessary is blank, the payment is not proceed.
   - ✔ Verify that with all combinations (valid card number and valid CVV) and using one thing as valid and other things as invalid are not proceed.
   - ✔ Verify that payment cannot be proceed if using blocked card.
   - ✔ Verify after a successful payment, all necessary details are received.
   - ✔ Verify that user gets message or an email after successful payment.
   - ✔ Verify that the are no double payment.