Levels and types of testing

Assignment

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- 2. You are the founder of a startup planning to launch a mobile application for sharing cat photos on iOS and Android devices: *Users can upload photos of cats but they cannot upload photos of other animals/people/objects. Users can add friends and leave likes and comments.* Write 5 functional test cases that would test the application.
- 3. Write what non-functional requirements you would like to apply to your startup's product. Describe the tests that would check them (3-5 examples).

2. Taken from the example of today's class:

Level Test	UNIT	INTEGRATION	SYSTEM	UAT
1.	App's icon is visible on iOS homescreen	App's GUI theme turns black if iOS theme switches to Dark Mode	Choosing 'Everyone' in the account's privacy settings, allows any user to be added as a Friend.	Users can create an account using their email
2.	App's login button has rounded corners	Swiping up the phone's screen sends the app in the background (iOS)	Uploading a photo creates a post on the feed visible to other users feed	Users can add other users to their friends list
3.	Username's input placeholder displays "Username"	Tapping the Upload button opens the built-in Gallery app	Al image recognition system feature denies users the option to upload photos undetected as cats	Users can install the app on both Android and iOS devices
4.	Upload button is visible in the bottom menu	Pressing the Like button increases the Likes number	Uploaded photos are stored on a media content database	Users can create a new post by uploading a photo
5.	User's icon is placed on bottom right corner	Bottom menu has fixed position when content is scrolled down	Refreshing the feed loads newly uploaded photos	Users can add comments under the tapped photo

2. Non-functional requirements and tests:

REQ 1

The app can be installed and run on all device types running iOS (14.5 or higher).

REQ 2

The app reconnects successfully to the internet after a network failure is detected.

REQ 3

The app supports a maximum of concomitantly 500 user logins per second at 0.01% performance load.

Level REQ	UNIT	INTEGRATION	SYSTEM
1.	Portability Test: Code is written for the targeted platform		Configuration Test: System runs successfully on the platform
2.			Recovery Test:
3.			Load Testing / Volume:

*** Just trying out to write test cases for the 1st subject ***

Functional test cases

#TC1:

Test case name: Successful user login

Module: Login. REQ ID : UL1

Description: User successfully logs in to the mobile app using the login credentials.

Preconditions

1. Device is connected to the internet while running the app.

2. The account has been already created and confirmed with valid login credentials.

Postconditions User is logged in to the app.

STEPS	TEST DATA	EXPECTED RESULTS	ACTUAL RESULTS	PASSED / FAILED
1. Launch the Cat mobile app.	App launch	Cat app launches with the GUI Login screen	Login screen loads with the input fields and sign in button	PASSED
2. Type in the login credentials.	Input fields	Each input field can be filled for each login credential	Email and password fields are filled with login credentials	PASSED
3. Tap the Sign-in button.	Login credentials	Login credentials are valid, user is logged in	User is logged in to the app	PASSED

#TC2:

Test case name: Single photo upload and post.

Module: New post.

REQ ID: UP1

Description: User uploads and posts an image into the app feed, from the device's Gallery. **Preconditions**

- 1. Device is connected to the internet while running the app.
- 2. User is logged in to the app's homepage.
- 3. Allowed permissions for Cat app to access the device's built-in Gallery app.

Postcondition: The photo is uploaded into the app's feed as a new post.

STEPS	TEST DATA	EXPECTED RESULTS	ACTUAL RESULTS	PASSED / FAILED
1. Tap the 'New post' button	'New post' button	'New post' button opens the Gallery app.	Button loads the Gallery app	PASSED
2. Browse the gallery for a photo.	Gallery	Gallery loads the device's images	All images stored on device are visible	PASSED
3. Tap a single photo.	Gallery	Tapped image loads from Gallery into the app's 'New post' menu	Image loads and is visible into the app's 'New post' menu	PASSED
4. Tap the 'Post now' button	'Post now' button	Selected image is uploaded to the app's feed.	Uploaded image is posted and visible on the app's feed.	PASSED

#TC3:

Test case name: Adding a user to the friends list.

Module: Friends List.

REQ ID: FL1

Description: Main user searches for another user, to add them to their friends list, by searching for their username.

Preconditions

- 1. The searched username is linked to an existing and valid account in the app's Users database.
- 2. The main user's Friends List has not reached the maximum number of Friends.
- 3. The searched user has set 'Everyone' to their 'Who can add me' account privacy setting.

Postcondition: The searched user is added to the Friends List.

STEPS	TEST DATA	EXPECTED RESULTS	ACTUAL RESULTS	PASSED / FAILED
1. Tap the 'Search for friends' button	'Search for friends' button	The button opens the 'Search for friends' app menu	'Search for friends' app menu loads with a 'Username' input field	PASSED
2. Type in the searched Username in the field	Username	The searched Username lists the linked user's profile	Searched user's profile appears on the list	PASSED

STEPS	TEST DATA	EXPECTED RESULTS	ACTUAL RESULTS	PASSED / FAILED
3. Tap the user's profile from the list.	User profile	The app redirects to the user's profile	User's profile is visible with the 'Add friend' button	PASSED
4. Tap the 'Add friend' button	'Add friend' button	The 'Add friend' button confirms the action by switching to 'Unfriend' button title	The button shows the 'Unfriend' title	PASSED