Banking Mobile Application testing question: Start from Question no 12.

Here's a comprehensive list of interview questions and answers for Banking Mobile Application Testing (Manual), focusing on both general manual testing concepts and specific banking domain challenges.

**Banking Mobile Application Testing (Manual) Interview Questions & Answers**

**I. General Manual Testing Concepts**

**1. What is manual testing, and how does it differ from automated testing?**

* **Answer:** Manual testing involves a human tester interacting with the application to identify bugs, check functionality, and ensure it meets requirements. It's about simulating user behavior. Automated testing, on the other hand, uses scripts and software tools to execute pre-defined test cases and compare actual results with expected results.
* **Difference:**
  + **Human Factor:** Manual testing relies on human observation, intuition, and critical thinking, making it good for usability, exploratory, and ad-hoc testing. Automated testing lacks this human element and follows a rigid script.
  + **Speed & Efficiency:** Automated testing is faster and more efficient for repetitive tasks and large regression suites. Manual testing can be time-consuming for such scenarios.
  + **Cost:** Initial setup for automation can be high, but long-term maintenance can be lower. Manual testing has lower initial costs but higher ongoing costs for repetitive tasks.
  + **Scope:** Manual testing excels at identifying UI/UX issues, aesthetic flaws, and nuanced user experience problems. Automated testing is best for functional and performance testing where a clear pass/fail criterion exists.

**2. Can you explain the Software Testing Life Cycle (STLC)?**

* **Answer:** The STLC is a sequence of activities performed during the testing process to ensure software quality. It typically includes:
  + **Requirements Analysis:** Understanding the software requirements from a testing perspective.
  + **Test Planning:** Defining the scope, objectives, strategy, resources, and schedule for testing.
  + **Test Case Development:** Designing and writing detailed test cases based on requirements.
  + **Test Environment Setup:** Preparing the hardware, software, and network configuration for testing.
  + **Test Execution:** Running the prepared test cases and logging defects.
  + **Test Cycle Closure:** Evaluating exit criteria, reporting, and sign-off.

**3. What are the different types of testing you are familiar with?**

* **Answer:** (Mention common types and elaborate on a few relevant to mobile banking)
  + **Functional Testing:** Verifying that each feature of the application works as per specifications (e.g., login, fund transfer, bill payment).
  + **Non-Functional Testing:** Testing aspects like:
    - **Performance Testing:** Checking speed, responsiveness, stability, and scalability under various loads (e.g., transaction processing time under peak load).
    - **Security Testing:** Identifying vulnerabilities and ensuring data protection (crucial for banking apps).
    - **Usability Testing:** Assessing ease of use and user-friendliness (important for a good user experience).
    - **Compatibility Testing:** Ensuring the app works across different devices, OS versions, and network conditions.
    - **Accessibility Testing:** Ensuring the app is usable by people with disabilities.
  + **Regression Testing:** Re-running previously passed tests to ensure new changes haven't introduced defects in existing functionality.
  + **Exploratory Testing:** Unstructured testing where testers explore the application to discover unexpected behavior and potential bugs.

**4. How do you write a test case? Please provide an example.**

* **Answer:** A test case is a set of conditions or variables under which a tester will determine if a system is working correctly. A good test case is clear, concise, and repeatable.
* **Components of a Test Case:**
  + **Test Case ID:** Unique identifier (e.g., TC\_Login\_001)
  + **Test Case Name/Title:** Brief description of what is being tested.
  + **Module/Feature:** The specific part of the application under test.
  + **Preconditions:** Conditions that must be met before executing the test.
  + **Test Steps:** Detailed steps to perform the test.
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* **Example (Login Feature):**
  + **Test Case ID:** BM\_Login\_TC\_001
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  + **Preconditions:** User has a registered and active account. Mobile banking app is installed and launched.
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    2. Enter valid Username (e.g., "testuser@example.com") in the Username field.
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**5. What is a bug life cycle? Can you explain the different stages?**

* **Answer:** The bug life cycle (or defect life cycle) describes the journey of a defect from its discovery to its resolution and closure.
* **Stages:**

New,Active/open, ready for QA/Retest, Closed, deferred, duplicate.

* + **New:** A tester finds a bug and logs it for the first time.
  + **Assigned:** The bug is reviewed by the lead and assigned to a developer.
  + **ACTIVE:** The developer starts working on fixing the bug.
  + **Fixed:** The developer has implemented a fix and marks the bug as fixed.
  + **Pending Retest:** The bug is awaiting retesting by the QA team.
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**6. How do you prioritize test cases?**

* **Answer:** Test case prioritization is crucial, especially in banking apps where certain functionalities are more critical. I prioritize based on:
  + **Risk:** High-risk areas (e.g., fund transfers, payments, security features) are prioritized first.
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  + **New Functionality/Changes:** New features or areas with recent code changes often require higher priority testing.
  + **Regulatory Compliance:** Any features directly related to banking regulations must be thoroughly tested with high priority.

**7. What is the difference between severity and priority in bug tracking?**

* **Answer:**
  + **Severity:** Refers to the impact of the bug on the system's functionality or performance. It describes "how bad" the bug is. (e.g., Blocker, Critical, High, Medium, Low)
  + **Priority:** Refers to the urgency with which the bug needs to be fixed or the order in which the bug needs to be fixed.. It describes "when" the bug should be fixed.
* **Example:** A cosmetic UI bug (low severity) on the login page of a banking app that prevents users from seeing some text might be given a high priority if it significantly impacts user experience and perception. Conversely, a backend error that only occurs rarely and has a workaround (low severity) might have a low priority.

**8. Can you explain the concept of regression testing?**

* **Answer:** Regression testing is a type of software testing that ensures that recent program or code changes have not adversely affected existing functionalities. It involves re-executing a subset of previously passed test cases to ensure that the previously developed and tested software still performs correctly after a change. For banking apps, this is vital due to the high sensitivity of financial transactions; any new feature or bug fix must not break existing payment or account management features.

**II. Mobile Application Testing Specifics**

**9. How do you approach testing a mobile application differently than a web application?**

* **Answer:** Mobile app testing requires consideration of factors not as prominent in web testing:
  + **Device Fragmentation:** Testing across a wide range of devices (iOS/Android), screen sizes, resolutions, and OS versions.
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**10. What are the key challenges in manually testing banking mobile applications?**

* **Answer:**
  + **Security is Paramount:** Banking apps handle highly sensitive financial data, making security testing extremely critical. Manual security testing requires deep knowledge of vulnerabilities (e.g., OWASP Mobile Top 10) and meticulous checks.
  + **Data Accuracy & Integrity:** Ensuring every transaction, balance update, and statement generation is 100% accurate. Errors can lead to significant financial loss and reputation damage.
  + **Regulatory Compliance:** Adhering to various financial regulations (e.g., KYC, AML, PCI DSS) which often have strict testing requirements.
  + **Complex Integrations:** Banking apps integrate with multiple third-party services (payment gateways, identity verification, SMS gateways). Testing these integrations manually can be complex.
  + **Real-time Transactions:** Verifying that transactions are processed in real-time and reflect immediately across all channels.
  + **Device Fragmentation (Manual Effort):** Manually testing on a large number of physical devices can be very time-consuming and expensive.
  + **Network Variability (Manual Effort):** Simulating and testing different network conditions manually is challenging.
  + **Error Handling:** Thoroughly testing all possible error scenarios, especially for financial transactions, to ensure clear and helpful messages are displayed.
  + **Performance Under Load:** While load testing is typically automated, understanding the manual user experience under high load requires careful observation.
  + **Frequent Updates:** Banking apps are frequently updated with new features and security patches, necessitating continuous regression testing.

**11. What are the critical functional areas you would focus on when testing a banking mobile application?**

* **Answer:**
  + **User Authentication & Authorization:**
    - Login (valid/invalid credentials, forgot password, account lockout, biometric login - fingerprint/Face ID).
    - Registration/Account Creation.
    - Multi-Factor Authentication (MFA/OTP).
    - Session Management (timeout, logout).
    - PIN/Pattern unlock.
  + **Account Management:**
    - Viewing account balances (savings, current, credit card, loan).
    - Viewing transaction history (filtering, sorting, search).
    - Mini statements, e-statements.
    - Updating personal information (address, contact details).
    - Account linking/unlinking.
  + **Fund Transfers:**
    - Within own accounts.
    - To other accounts within the same bank.
    - To other bank accounts (NEFT, RTGS, IMPS, local equivalents).
    - Adding/managing beneficiaries.
    - Transaction limits.
    - Scheduling future payments/recurring payments.
  + **Bill Payments:**
    - Paying utility bills (electricity, water, gas, internet).
    - Paying credit card bills.
    - Adding/managing billers.
    - Scheduling bill payments.
  + **Payment Gateway Integration:** (e.g., UPI, QR code payments, mobile wallets)
    - Initiating payments.
    - Successful/failed transactions.
    - Refunds/cancellations.
  + **Loan & Investment Features:**
    - Viewing loan details, EMIs.
    - Applying for loans.
    - Managing investments.
  + **Customer Support:**
    - In-app messaging/chat.
    - FAQ sections.
    - Branch/ATM locator.
  + **Notifications & Alerts:**
    - Transaction alerts (SMS, push notifications).
    - Promotional notifications.
    - Account alerts.

**12. Can you give some specific test cases for a fund transfer feature in a mobile banking app?**

* **Answer:**
  + **Positive Scenarios:**
    - Verify successful fund transfer between own linked accounts.
    - Verify successful fund transfer to a new beneficiary within the same bank.
    - Verify successful fund transfer to a new beneficiary in another bank via IMPS/NEFT.
    - Verify successful fund transfer to an existing beneficiary.
    - Verify real-time update of sender's and receiver's balance after a successful transaction.
    - Verify receipt of transaction confirmation message/email/push notification.
    - Verify transfer of minimum allowed amount.
    - Verify transfer of maximum allowed amount (within daily/transaction limits).
    - Verify scheduled payment is processed on the scheduled date.
  + **Negative Scenarios:**
    - Verify transfer with insufficient funds in the sender's account.
    - Verify transfer with invalid account number/IFSC code for beneficiary.
    - Verify transfer exceeding the daily/transaction limit.
    - Verify transfer using an expired/blocked beneficiary account.
    - Verify behavior when network connectivity is lost during a transaction (before/during/after).
    - Verify behavior when special characters or invalid amounts are entered in the amount field.
    - Verify behavior when the app is minimized/switched during a transaction.
    - Verify error message for failed transactions.
    - Verify that double debit does not occur if the user attempts to make the same payment multiple times.

**13. What security testing aspects would you focus on for a banking mobile app during manual testing? Go through this!!!**

* **Answer:**
  + **Authentication & Session Management:**
    - Brute-force attacks on login.
    - Weak password policies (e.g., allowing simple passwords).
    - Session hijacking (if possible through manual manipulation).
    - Proper session expiry after inactivity/logout.
    - Biometric authentication bypass attempts.
  + **Data Storage:**
    - Checking if sensitive data (passwords, PINs, account numbers) is stored insecurely on the device (e.g., in plain text in log files, preferences).
    - Ensuring proper encryption for locally stored data.
  + **Data Transmission (Man-in-the-Middle - MitM):**
    - Verifying that all communication uses HTTPS/SSL/TLS and is not susceptible to MitM attacks (e.g., using a proxy tool like Burp Suite to check for unencrypted traffic or certificate pinning bypass).
  + **Input Validation:**
    - Testing for injection flaws (SQL injection, XSS if any webviews are present) by inputting malicious strings into fields.
  + **Authorization:**
    - Ensuring users can only access their own data and perform authorized actions. Attempting to access other users' data or privileged functions.
  + **Error Handling:**
    - Checking if error messages expose sensitive backend information (e.g., database errors, stack traces).
  + **Reverse Engineering/Code Tampering:** (More for automated/penetration testing, but awareness is key for manual testers)
    - Understanding that apps can be reverse-engineered and looking for obvious vulnerabilities that might facilitate this.
  + **Rooted/Jailbroken Device Detection:**
    - Verifying if the app behaves differently or has security measures on rooted/jailbroken devices.
  + **Keyboard Caching:**
    - Ensuring sensitive data typed into input fields is not cached by the keyboard.
  + **Clipboard Functionality:**
    - Verifying that sensitive data is not stored in the clipboard after copy/paste actions.
  + **Screenshot Prevention:**
    - Checking if sensitive screens prevent screenshots or screen recording.

**14. How would you test the payment gateway integration within a banking mobile app? Go through this!!!**

* **Answer:**
  + **Functional Flow:**
    - Initiate a payment using various methods (e.g., debit card, credit card, UPI, net banking).
    - Verify successful payment and correct deduction from the account.
    - Verify failed payment scenarios (insufficient funds, incorrect details, expired card).
    - Test transaction limits (minimum/maximum).
    - Verify successful redirection back to the banking app after payment.
    - Test payment with different banks/issuers.
    - Verify accurate display of merchant name and transaction details on the gateway.
  + **Error Handling:**
    - Test scenarios where the payment gateway times out or returns an error.
    - Verify appropriate error messages are displayed to the user.
    - Ensure no double debits occur if a payment fails or is interrupted.
  + **Security:**
    - Verify that the payment gateway page uses HTTPS.
    - Check for secure input of sensitive card details (masked input, virtual keyboard options).
    - Test OTP/3D Secure authentication flow.
    - Ensure that sensitive payment details are not stored within the app or on the device.
  + **Performance:**
    - Observe the response time for payment initiation and completion.
    - How does the app behave under slow network conditions during a payment?
  + **User Experience:**
    - Is the payment flow intuitive and easy to understand?
    - Are the instructions clear?

**15. What is "Device Fragmentation" in mobile testing, and how do you handle it manually for a banking app?**

* **Answer:** Device fragmentation refers to the wide variety of mobile devices, screen sizes, resolutions, operating systems (iOS and different Android versions), and hardware configurations that an app needs to support.
* **Manual Handling:**
  + **Prioritize Devices:** Identify the most commonly used devices and OS versions by the target audience using analytics or market research. Start testing on these critical devices.
  + **Utilize a Device Lab:** Maintain a collection of real physical devices covering different manufacturers (Samsung, Xiaomi, Apple), models, and OS versions.
  + **Cloud-Based Device Farms:** Use platforms like BrowserStack or Sauce Labs that provide access to a wide array of real devices and emulators/simulators for testing without owning all devices.
  + **Emulators/Simulators (with caution):** Use them for initial sanity checks and basic functionality, but always perform final testing on real devices as they mimic real-world conditions more accurately (e.g., battery, network, CPU).
  + **Visual Inspection:** Meticulously check UI elements, layouts, fonts, and images for rendering issues across different screen sizes and orientations.
  + **Performance Monitoring:** Observe app performance (smoothness, responsiveness) on both high-end and low-end devices.

**16. How do you ensure data accuracy in a banking mobile application through manual testing? Go through this!!!**

* **Answer:** Data accuracy is paramount in banking. I would ensure it by:
  + **Thorough Functional Testing:** Meticulously verifying that every transaction (deposits, withdrawals, transfers, payments) correctly updates account balances and transaction histories.
  + **Cross-Verification:** Comparing data displayed in the mobile app with backend databases, web portals, or physical statements (if applicable).
  + **Positive and Negative Scenarios:** Testing with valid and invalid data inputs, boundary values, and edge cases to ensure the app handles them correctly and doesn't corrupt data.
  + **Concurrent Operations:** Testing what happens if multiple transactions or updates occur simultaneously from different channels (e.g., mobile app, ATM, web banking).
  + **Reconciliation:** For payment features, ensuring that the amount debited matches the amount credited and any fees are correctly applied.
  + **Historical Data Verification:** Checking if past transactions and statements are displayed accurately.
  + **Rollback Mechanisms:** For failed transactions, verifying that the system correctly rolls back and doesn't leave data in an inconsistent state.

**17. What aspects of usability testing are crucial for a banking mobile app?**

* **Answer:** Usability is key for user adoption and satisfaction. Crucial aspects include:
  + **Intuitive Navigation:** Is it easy to find features like fund transfers, bill payments, and account statements?
  + **Clarity of Information:** Are account balances, transaction details, and error messages clear and easy to understand?
  + **Consistency:** Is the UI consistent across different screens and flows?
  + **Feedback:** Does the app provide clear feedback for user actions (e.g., loading indicators, success/failure messages)?
  + **Error Prevention & Recovery:** Are there mechanisms to prevent common errors, and can users easily recover from mistakes?
  + **Learnability:** How easy is it for a new user to learn and use the app?
  + **Efficiency:** Can users complete common tasks quickly and with minimal steps?
  + **Accessibility:** Is the app usable by individuals with disabilities (e.g., proper color contrast, large enough text, compatibility with screen readers)?
  + **Readability:** Are fonts, text sizes, and colors appropriate for a mobile screen?

**18. Describe a challenging bug you found in a banking mobile app and how you reported it.**

* **Answer:** (Prepare a specific, real-world example if possible, or use a plausible scenario)
  + **Scenario Example:** "During regression testing of a new feature that allowed users to 'split bills' with contacts, I discovered a critical bug. When a user initiated a bill split and then quickly exited the app before the transaction fully processed (e.g., by force-closing or due to an incoming call), the transaction would sometimes be partially recorded, leading to a discrepancy in the user's available balance, but the other party wouldn't receive the payment request. This was inconsistent and difficult to reproduce initially."
  + **How I Reported It:**
    - **Clear Title:** "Critical: Partial Bill Split Transaction Leading to Balance Discrepancy on App Interruption"
    - **Detailed Steps to Reproduce:** Provided precise steps, including the timing of the app interruption. "1. Open 'Split Bill' feature. 2. Enter amount and select recipient. 3. Initiate payment. 4. Immediately (within 2 seconds) force close the app / simulate incoming call. 5. Reopen app and check account balance. 6. Verify if recipient received the request."
    - **Actual Result:** "User's account balance debited, but recipient did not receive the bill split request. Transaction status in history shows 'Pending' or disappears."
    - **Expected Result:** "Either the transaction should fully complete and reflect for both parties, or it should completely roll back with no balance change if interrupted."
    - **Environment:** Specified device model, OS version, network condition, app version.
    - **Attachments:** Included screenshots and screen recordings demonstrating the issue and the balance discrepancy.
    - **Severity:** Critical (financial discrepancy, loss of trust).
    - **Priority:** High (impacts core functionality, data integrity).
    - **Impact:** Explained the potential financial loss and negative user experience.