Analysis part 1 - Exercise

Analysis part 1

These exercises will give you the opportunity to practice or experiment with skills such as:

- Analysing materials like specifications, wireframe diagrams, etc.
- Thinking ahead and planning
- Designing/creating test cases, determining steps/actions, thinking about required setup (such as environments or installed applications), preparing test data, etc.
- Discussing with other testers so that more ideas, approaches, etc. are brought into the planning

Banking Application

Functional Specification

Specification Id	Details
BANK-01	User can enter username and password into a login page to log in to the banking application
BANK-02	User can view all of their accounts in one page
BANK-03	User can view details of a single account, including balance and transaction history
BANK-04	A transaction page allows a user to specify an amount of money, a from account and a to account
BANK-05	A transaction causes an amount of money to move from one account to another, altering both account balances appropriately

Assumptions

To make this exercise a little smaller, here are some assumptions that you can make for the purpose of this given application:

- Users already exist in the system - there's no sign-up functionality
- Accounts already exist and already have money in them - there's no depositing, withdrawals, etc.
- Accounts are referenced by some sort of unique identification number (as shown in one of the wireframes)

Wireframes

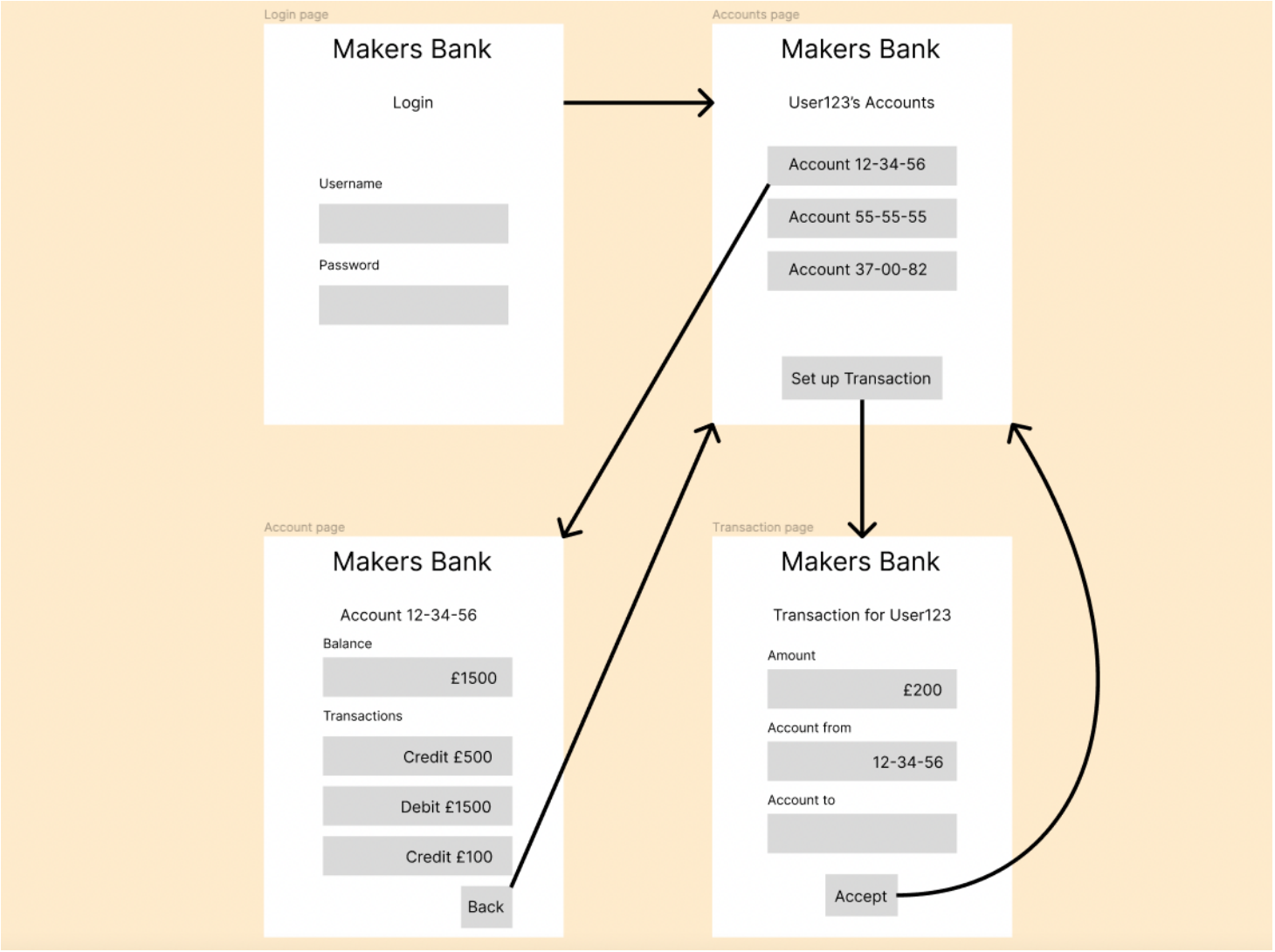
Banking Wireframes

Tree of test areas

- Login Page
  - Implicit function is to display log in fields 'Username' and 'Password'
  - Login with valid account --> view accounts
    - valid username box
    - valid password box
    - both of which are validated with a DB
    - Once satisfied - redirection to 'Accounts page'

    - Would expect the page to identify if either field has been entered incorrectly
        - this will not show the user anything but the login page and an error
- Accounts Page (multiple)
    - Implicit function is to display a list of acounts for the valid account that has been logged into
    - Clicking on a list item within accounts --> redirect to that account on 'Account Page'
    - Clicking on 'Set up Transaction' --> Transaction page withe correct details
    - Would expect the page to not redirect to the wrong account, or any other page, upon clicking on an account
        - Same for the transaction button
- Account Page (singular)
    - Implicit function is to display the details of the previously selected account - containing the account details at the top, the balance, and the (recent) transactions. At the bottom there will be a 'Back' button
    - Clicking 'Back' button will return the user back to the 'Accounts page'.
- Transaction Page
  - Implicit function is to display an amount, account from and account to field, which can be entered into. There will be an 'Accept' button at the bottom
  - The form should be able to be filled out with valid details and 'accepted' by clicking the 'Accept' button.
  - Would expect account from - to be a drop down
  - Would expect the amount field to only accept a number that matches >= the available balance associated with that account
  - Would expect account to - accept a valid bank account entry
  - Would expect any incorrect entries of any variation to return an appropriate error. Eg:
  - The amount you have entered is invalid
  - please select an account to transfer from
  - please select an account to transfer to

- etc



Assumptions:

- there should be a time out function
- biometrics 2fa otp
- confirmation messages for transactions etc
- that the entire application is as simple as is shown in their spec
- expect the currency to match the location and balance of the user
    - conversions implicit in transactions
- that everything is super duper secure
- that it works on all browsers and environments equally
- Users already exist in the system - there's no sign-up functionality
- Accounts already exist and already have money in them - there's no depositing, withdrawals, etc.

- Accounts are referenced by some sort of unique identification number (as shown in one of the wireframes)

Quesitons for the person who wrote this:

- WHY?
- Is security built in? If so how/what?

Spend some time considering what the highest risks could be with this particular banking application as specified. What might "quality" mean in the context of this application, and from whose perspective?

Risks

- unclear how things are secured (bank accounts and money is a big deal)
- 2fa otp etc etc appears not to exist
- Bank account numbers are small/weak
- privacy filter (overlay that fuzzes nonessential details)
- screen protection (screenshots etc)
- ways to log in - how the log in cache is stored on any device
- theft obviously...
- does the app have enough functionality to realistically keep users?
- input validation - injection, enumeration, spoofing etc etc etc

What is Quality in this case?

- Security is a key factor
- usability and functionality
- Nicely designed - layout - smooth

Hour number 1 - exploratory testing

1. can we navigate the pages with acceptable details to all the shown pages and verify that transactions have been worked
2. check each page with valid and invalid entries
3. check for timeouts on each page?
4. right user but wrong password multiple times - does this lock the account or similar?