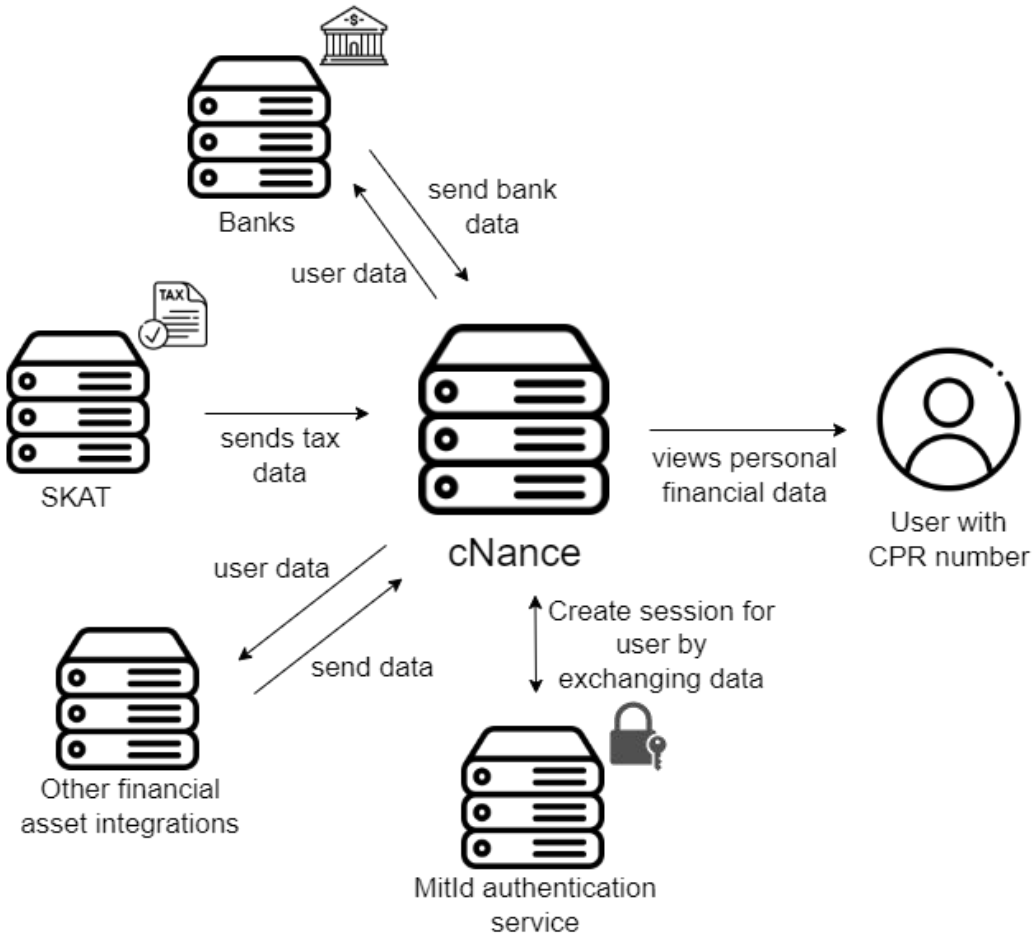
cNance

Group 2

Problem we want to solve

- No overview over personal financial assets
- Higher public awareness of personal finance
- Better, personal offers from banks

Informal Context Diagram



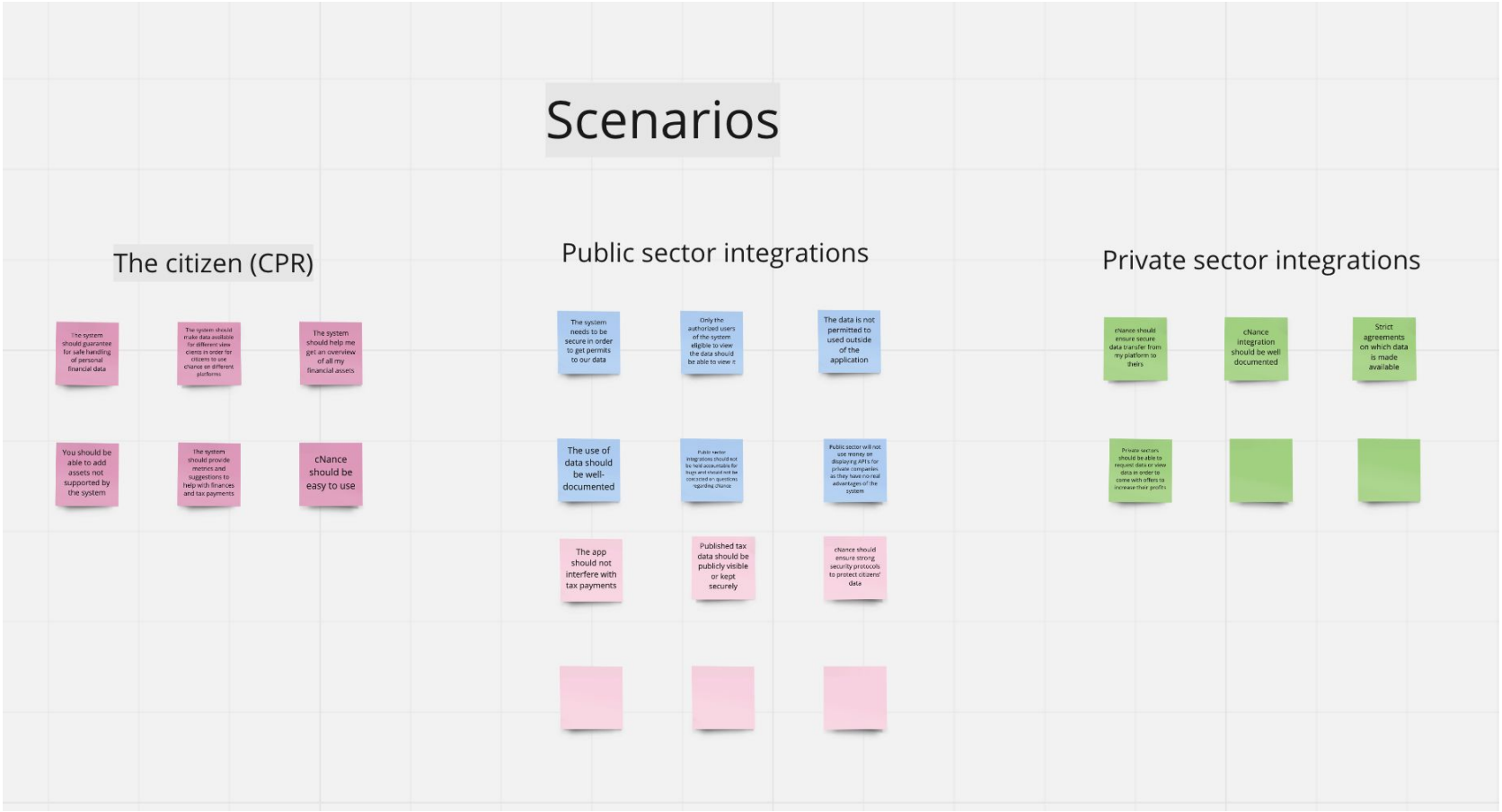
Overall functionality

Main idea of the system

- Collect all kind of data related to personal finance and assets via integrations to both the public and private sector
    - Integration examples: Banks, SKAT, Tinglysningen, pension, etc.
- Display the collected data in user friendly way for the user
- A user should login with a CPR connected login-system, like MitId, as to ensure authorized access
- The interested integrations should be able to send offers based on the user data, e.g. a bank can send available loan offers to the user

Quality Attribute Workshop Process

I. Identification of stakeholders
II. Two rounds of identifying scenarios for each stakeholder
III. Prioritization of scenarios
    A. Scenarios discussed in detail
    B. Scenarios prioritized in collaboration
IV. Identification of two main architectural drivers based on scenarios
    A. Usability
    B. Security
V. Refinement of six scenarios (two for each architectural driver)



Screenshot from QAW using the tool Miro. Notice that the stakeholders were later changed upon feedback.

Stakeholders

Government owned institutions

Private sector businesses

Users

cNance developers

Architectural Drivers

- Safe handling of personal financial data
  - High security standard
- The average Danish citizen should be able to use the app
  - Should be easy to use

Safe handling of personal financial data

Scenario A

Quality: Security

Source: Non-authorized third party

Stimulus: Requests salary data from Bank Integration A

Artefact: Integration API

Environment: Normal operation

Response: Receives status code 403 (Access Denied) for not being authorized

Measure: Only cNance receives and reads data from integrations. It should be infeasible as an non-authorized third party to get any data.

Safe handling of personal financial data

Scenario B

Quality: Security

Source: User

Stimulus: Views monthly income and expenses from bank data

Artefact: Integration API

Environment: Normal operation

Response: Get most recent data for the user from the bank

Measure: Only authenticated user-specific data is shown

Safe handling of personal financial data

Scenario C

Quality: Security

Source: cNance

Stimulus: Stores salary data for user

Artefact: Data storage

Environment: Normal operation

Response: Data is stored safely and retrievable

Measure: Data is safely persisted for two years and only available for the user

The average Danish citizen should be able to use the app

Scenario D

Quality: Usability

Source: User

Stimulus: Views monthly income and expenses on their smartphone

Artefact: cNance app

Environment: Normal operation

Response: Graph and list showing monthly overview

Measure: >90% of the users find the interaction and navigation intuitive

The average Danish citizen should be able to use the app

Scenario E

Quality: Usability

Source: User

Stimulus: Manually adds third party financial integration

Artefact: cNance

Environment: Normal operation

Response: New integration added and linked to user in cNance

Measure: >90% of the users spend less than 5 minutes on this action

The average Danish citizen should be able to use the app

Scenario F

Quality: Usability

Source: User

Stimulus: Views latest bank account activity

Artefact: cNance

Environment: System is operational, but the integration to the users bank has been down for 2 days

Response: Shows the latest saved data and makes user aware of possibly missing data

Measure: >90% of the users understand that the data shown is not up to date