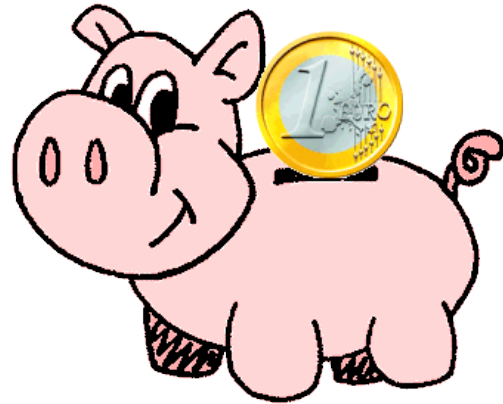# ShopAdmin

Control your expenses with receipt scanner

PITCH SLIDES

SHOPADMIN GOING AGILE

SCRUM AND SHOPADMIN

GENESIS OF SHOPADMIN

Kateryna Pryshchepa, Iuliia Guk

ShopAdmin

Control expenses app with receipt scanner

Vision

Whom is it for?

students or young family.

Functionality:

- Manually enter your outgoing transactions
- Scanners that auto-extract receipt information such as shop names, data and time, amount

What problems does it solve?

Save time for counting expenses.

What alternatives are available?

- Cashbook Expense Tracker
- Expense Manager
- Expensify

Kateryna Pryshchepa, Iuliia Guk

Architecture

Retrieve Data →

Store Data ←

Model	Controller	View
Store required info: shop name, date and time, amount.	Number & text recognition OCR (optical character recognition)	•Display receipt information •Sort and categorize expenses •Summarize expenses

Challenge

- Using Android for the first time

- Implementing Tesseract Library OCR engine and Leptonica Image Processing Library

Example:

Receipt	Amount
ALDI	19.86
PENNY	15.31
REWE	25.35
Total:	60.52

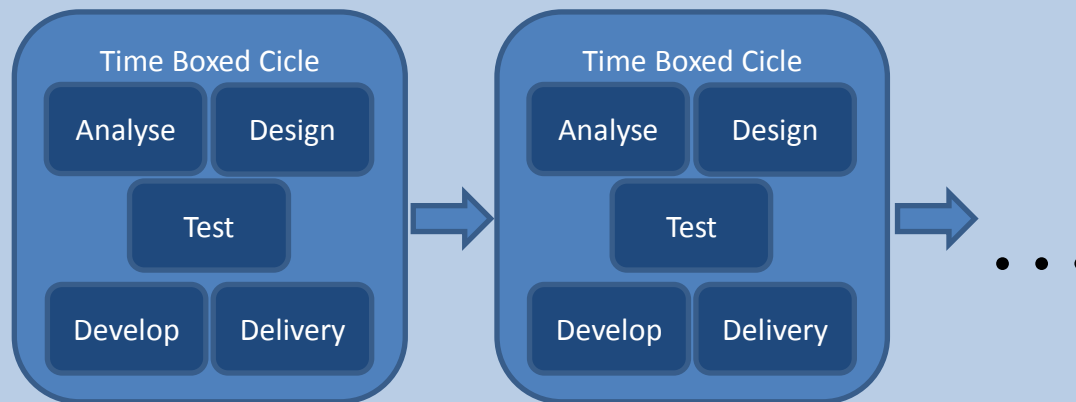PITCH SLIDES

SHOPADMIN GOING AGILE

SCRUM AND SHOPADMIN

GENESIS OF SHOPADMIN

- In general the development of ShopAdmin will take place in an agile way
- Mainly differentiation between being agile and a classical approach
  - time boxed approach
- But furthermore agile has its merits and principles

Merits
- Commitment
- Focus
- Openness
- Respect
- Courage
- Simplicity
- Communication
- Feedback

Agile

Time Boxed Cicle
- Analyse
- Design
- Test
- Develop
- Delivery

Time Boxed Cicle
- Analyse
- Design
- Test
- Develop
- Delivery

• • •

Principles
1. Satisfy the customer
2. Welcome changes
3. Frequent deliveries
4. Cross-functional
5. Support and trust
6. Direct communication
7. Working software
8. Sustainable speed
9. Ambition for technical excellence
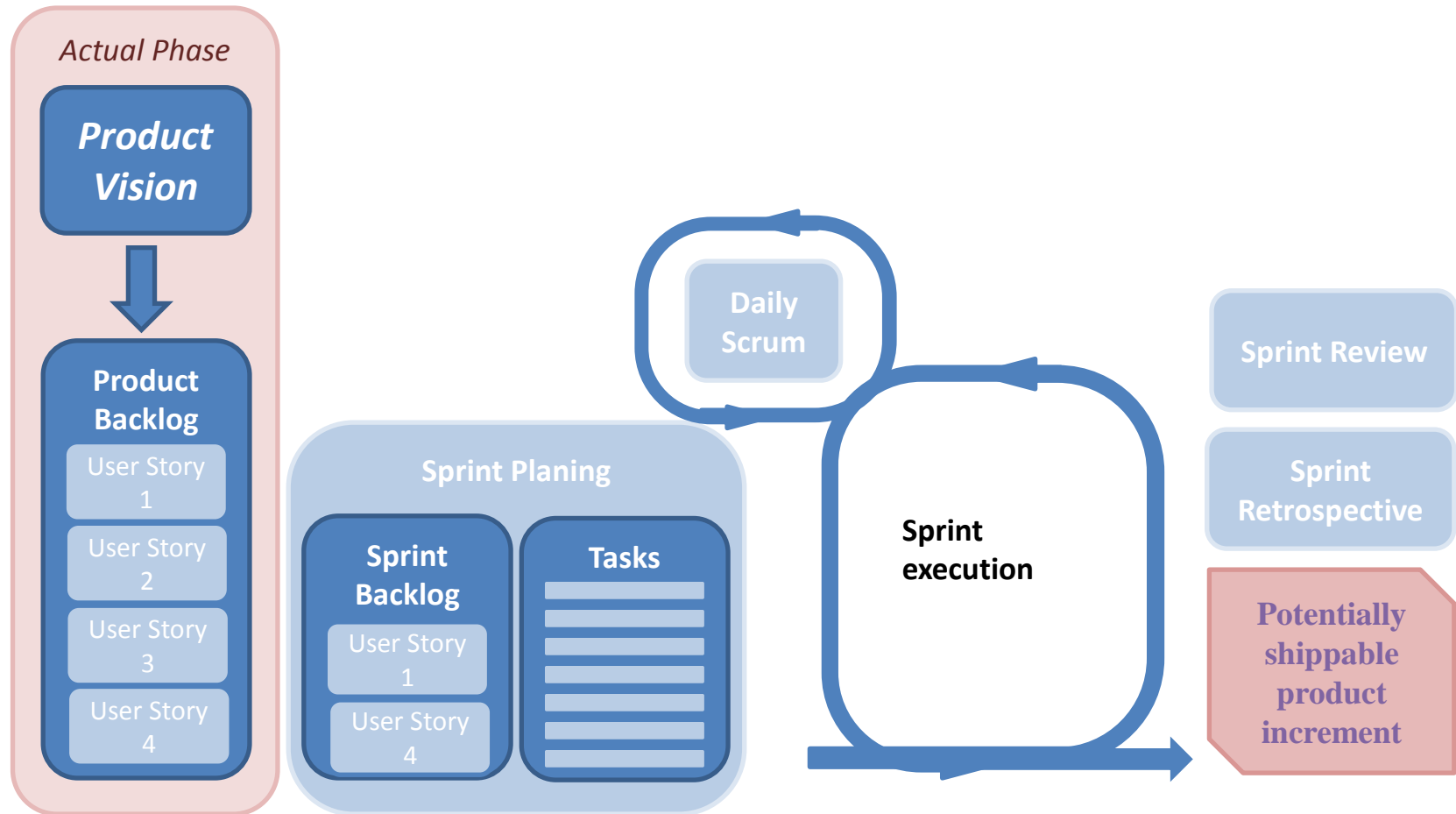10. Self organization
11. Review and adapt
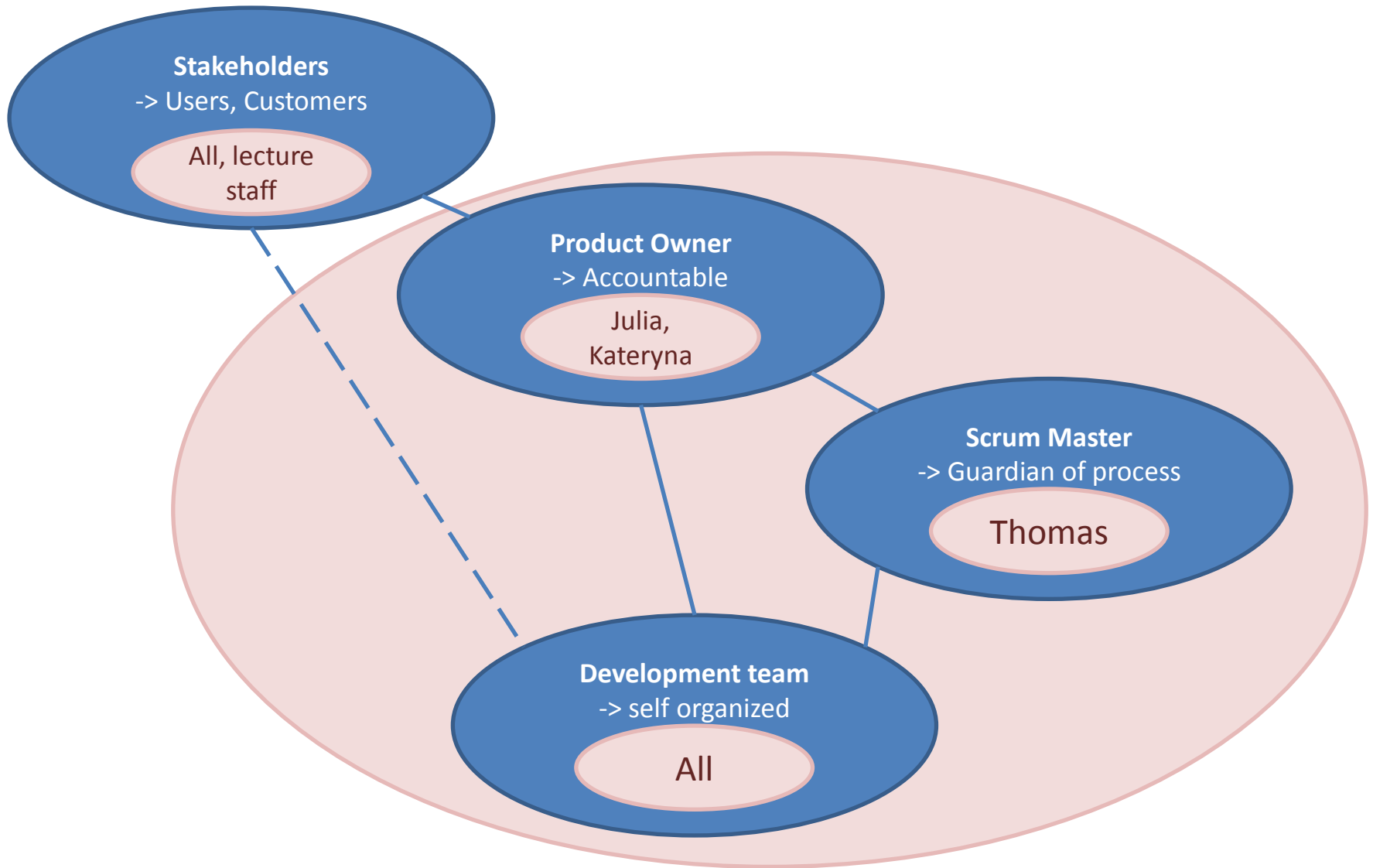
PITCH SLIDES

SHOPADMIN GOING AGILE

SCRUM AND SHOPADMIN

GENESIS OF SHOPADMIN

• While being agile the development approach of ShopAdmin follows the SCRUM Process

Stakeholders
-> Users, Customers

All, lecture staff

Product Owner
-> Accountable

Julia, Kateryna

Scrum Master
-> Guardian of process

Thomas

Development team
-> self organized

All

Characteristics:

- Self organizing team following the one-team-approach

- Interdisciplinary

- Close coworkers of the product owner

  - Support regarding product backlog refinement

- Responsible for sprint planning

Attributes:

- 3 – 9 persons

- Ideally T-Shaped members

The T-Shape and you…

Broad Know-How

Design GUI QS Testing SQL

Expert Know-How

Backend development Java Servlets
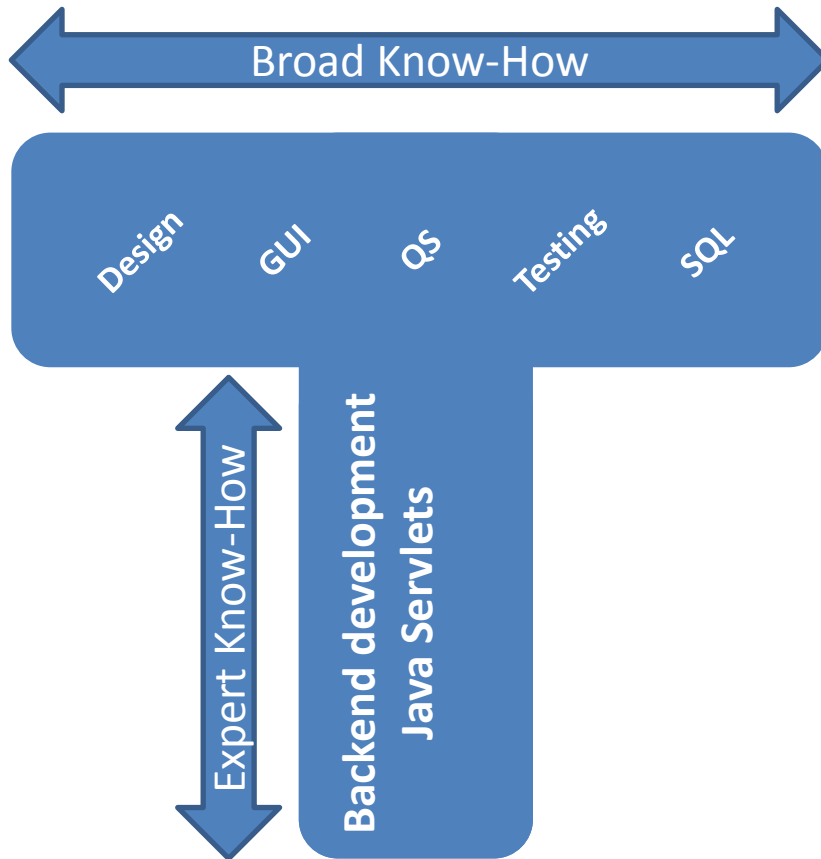
Idea:

- Many T-Shapes cover all aspects and everybody has base knowledge in all areas
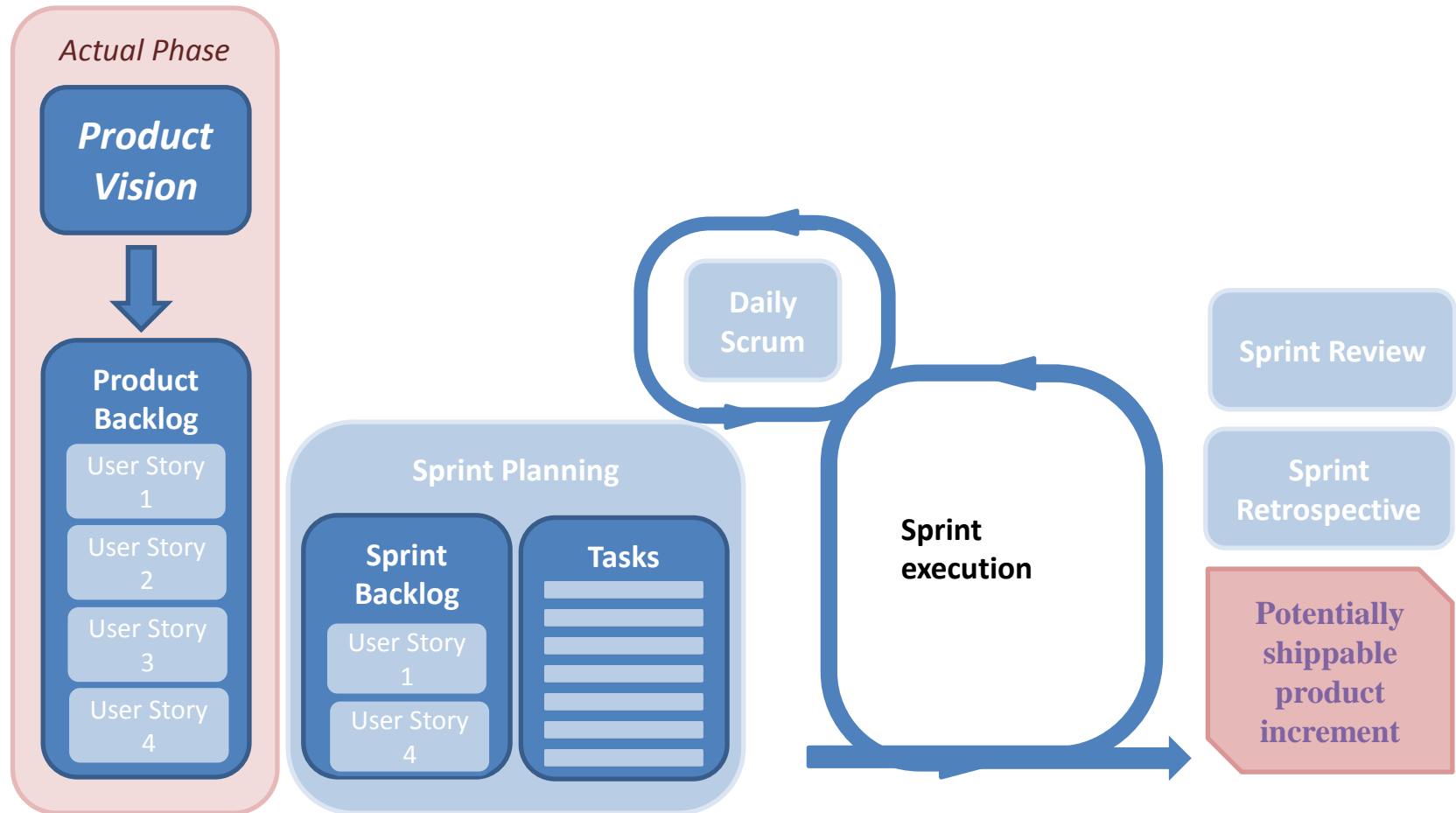
PITCH SLIDES

SHOPADMIN GOING AGILE

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GENESIS OF SHOPADMIN

VISION ESTABLISHMENT *15.11.2015 – 27.11.2015*

PLANNING THE FIRST SPRINT *27.11.2015*

DAILY SCRUM *04.12.2015*

Where are we now?

Starting from the vision of ShopAdmin during the establishment phase following topics have been addressed and solved:

Product Vision

Product Backlog

User Story 1

User Story 2

User Story 3

User Story 4

- SetUp product backlog
  - Preparation of user stories
  - Stabilization of vision by UML diagram
  - Concretization of user stories by definition of use cases
- Arrangement of technical infrastructure
  - GitHub: created and tested
  - Development platform: Android SDK available to the team
 - ScrumDesk: Initialized for convenience
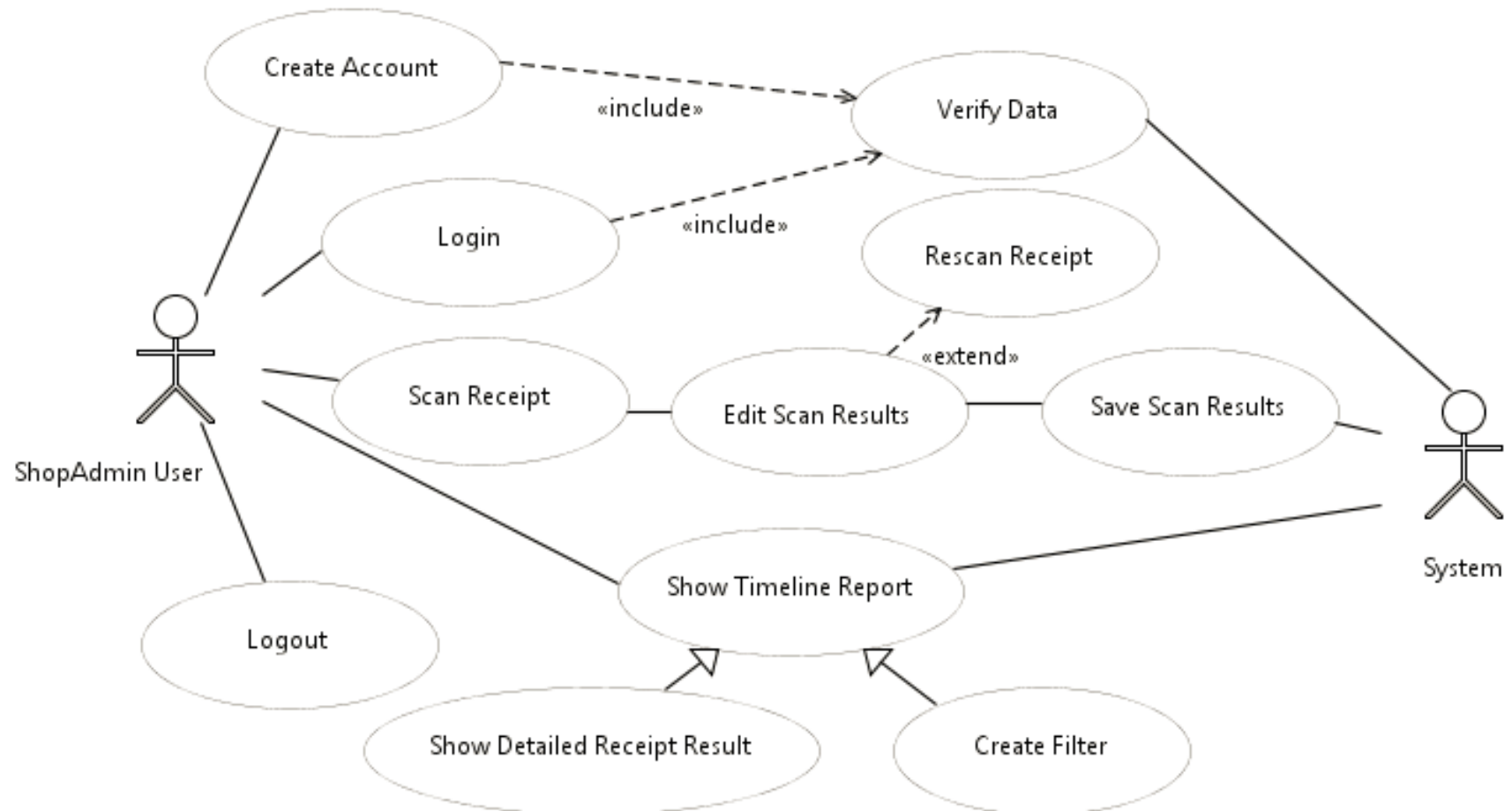
Definition of done:

1. All tasks have to be completed

2. All implementations have to be commented

3. All tests have to successfully run through

4. Documentation has to be updated

5. Everything has to be pushed to git

6. Scrum user story has to be set to completed

VISION ESTABLISHMENT *15.11.2015 – 27.11.2015*

PLANNING THE FIRST SPRINT *27.11.2015*

DAILY SCRUM *04.12.2015*

Where are we now?
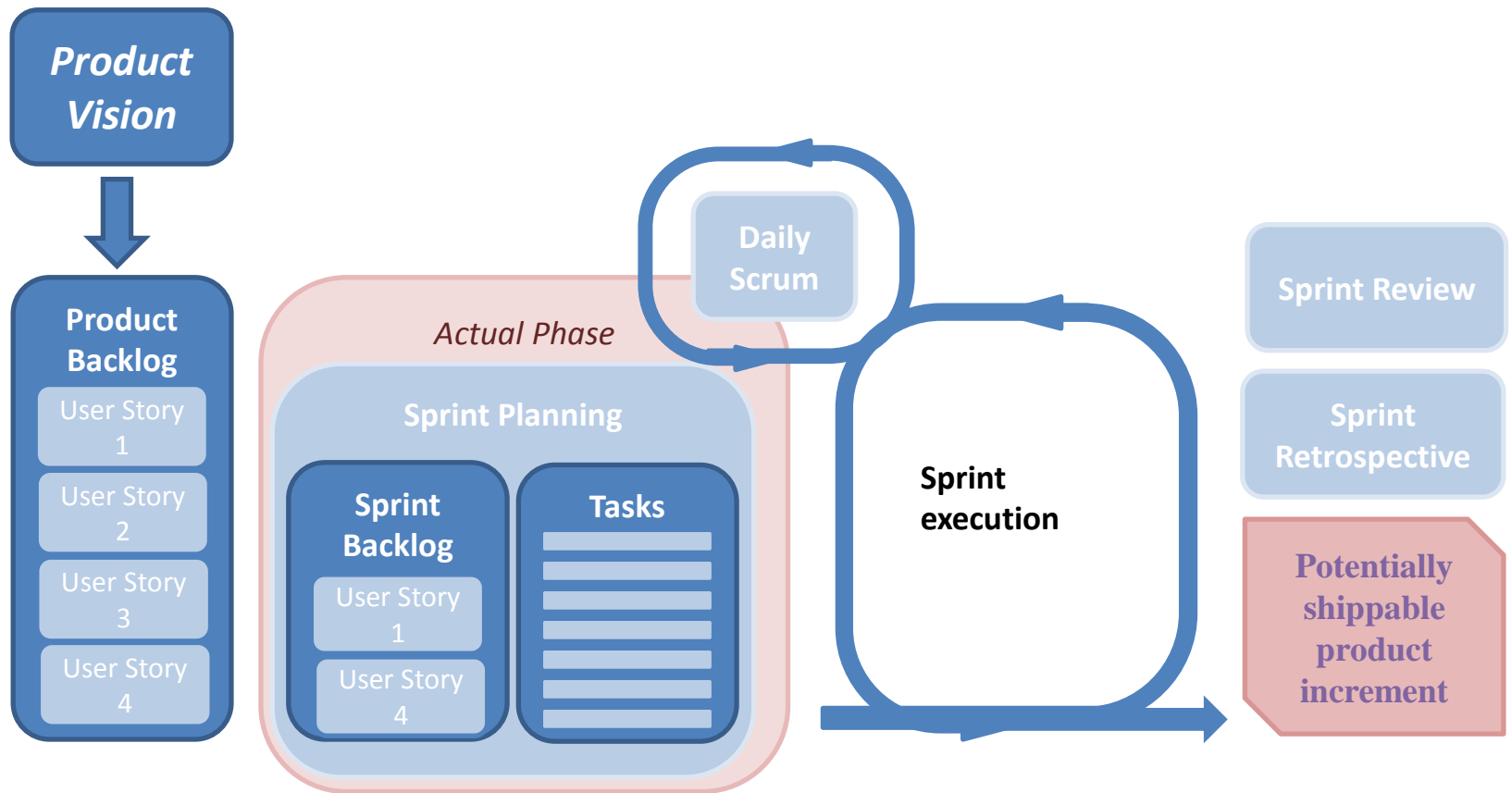
Purpose of the sprint planning:

- Define the product backlog items which will be developed *(What?)*
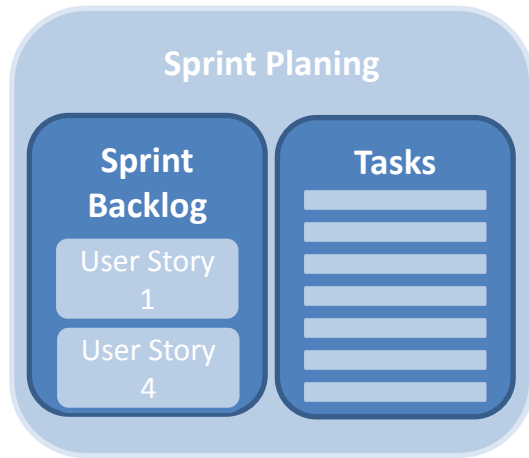- Plan the development *(How?)*

Preconditions:

- Product backlog is sufficient cultivated
- Business owner has a clear idea of the sprint goal
- Clarity of the capacity of the development team (resources and tools)

Result:

- Formalized Sprint Backlog
- Commitment on sprint goal

The Sprint Goal:

- Main goal for the first sprint is to develop a technical spike for the whole screen flow of the app, to build a sustainable base to grow further in the following sprints.
- Furthermore the UserStories Registration and Login are targeted for implementation.

Sprint Planing

Sprint Backlog

User Story 1

User Story 4

Tasks

- Additional benefit in getting used to Android development and strengthening of the SCRUM methodology.
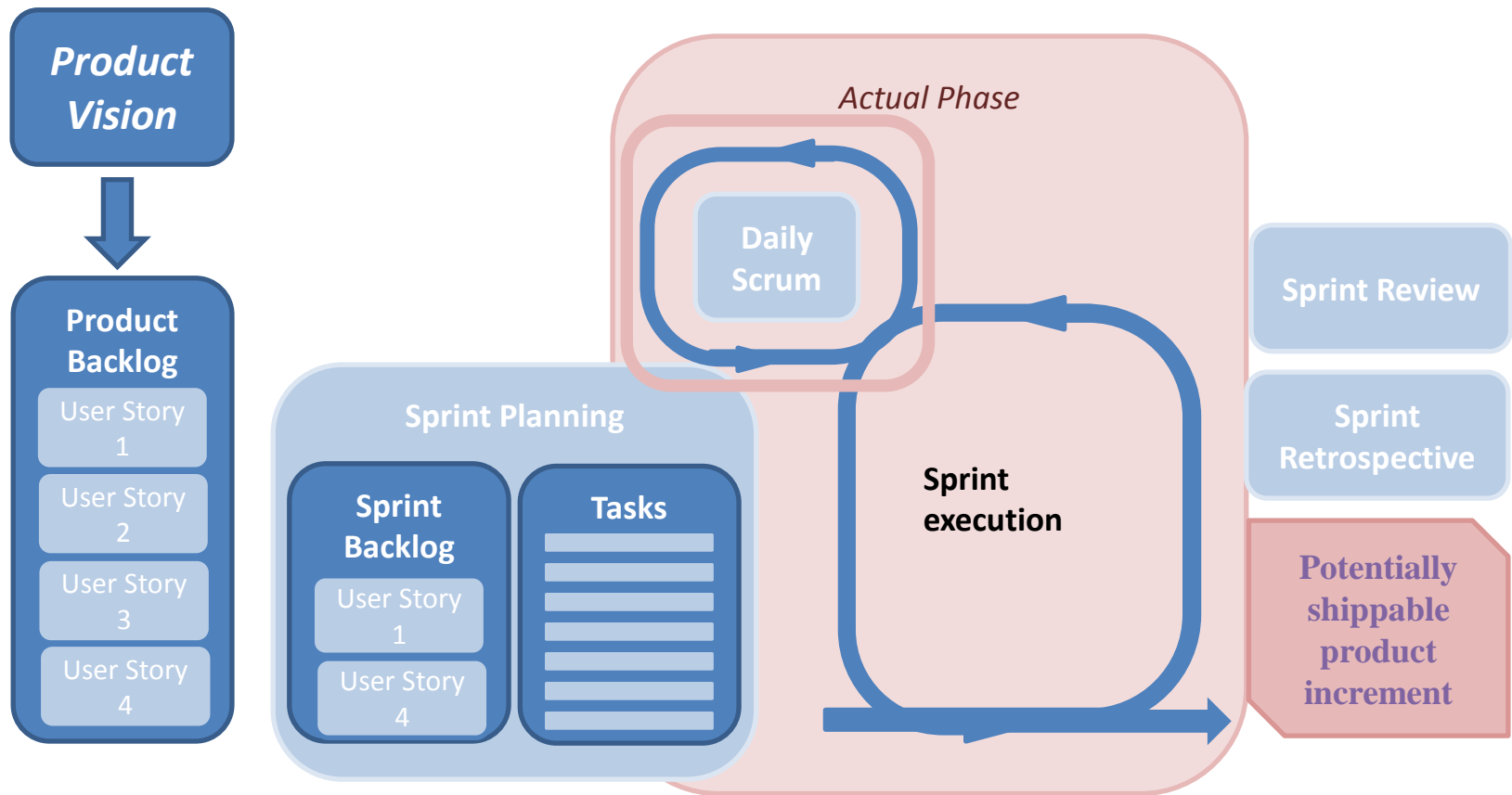
- Scheme of screens:
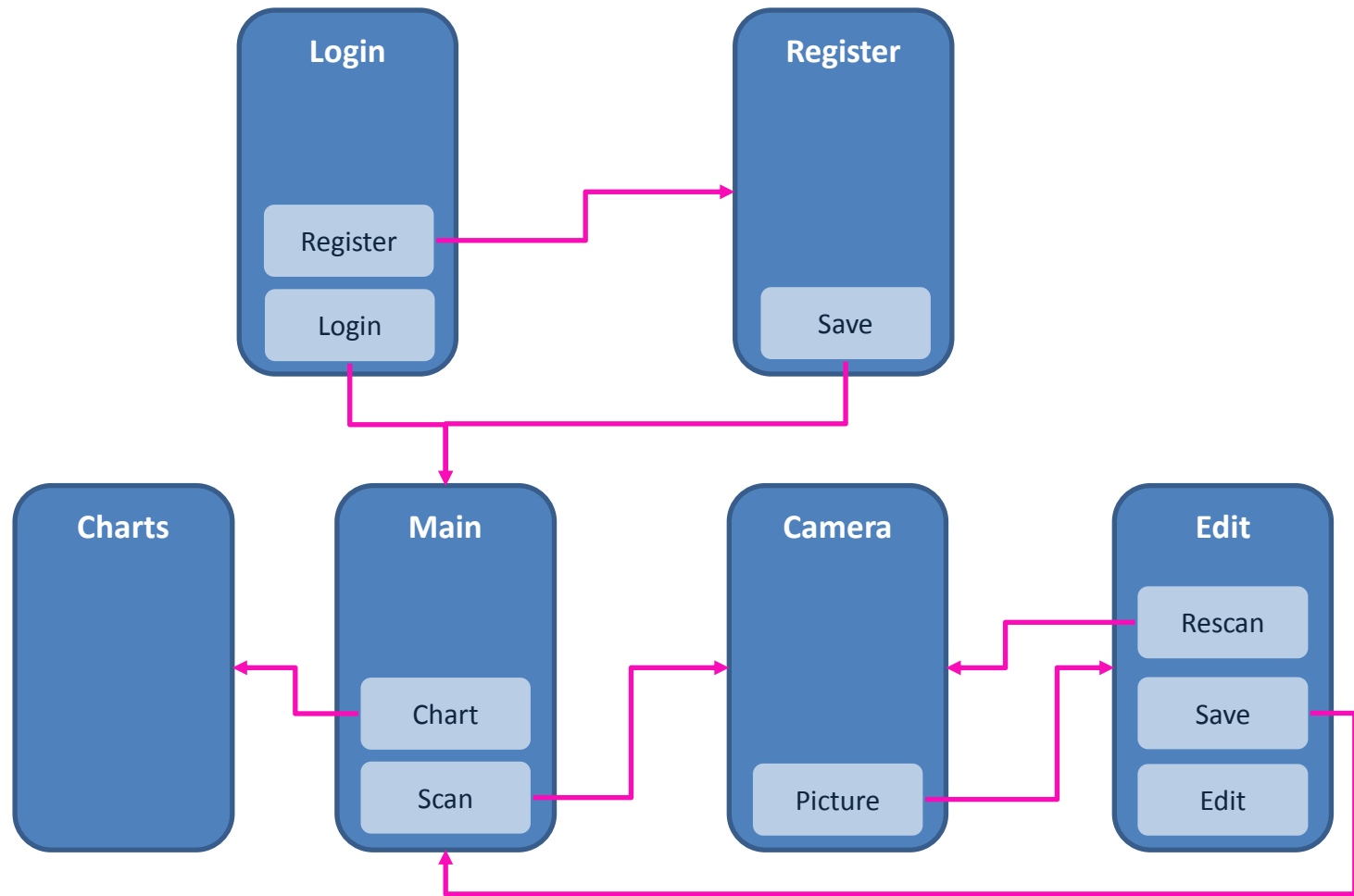
VISION ESTABLISHMENT *15.11.2015 – 27.11.2015*

PLANNING THE FIRST SPRINT *27.11.2015*

DAILY SCRUM *04.12.2015*

Where are we now?

Purpose:

- Synchronization of the development team

- Planning till the next daily scrum *(Inspect & Adapt)*

Preconditions:

- Discipline regarding time box, communication, accuracy

Result:

- Answers on the *3* questions by *all* participants:

  1. What was achieved since the last daily scrum

  2. What is planed till the next daily scrum

  3. Are there impediments on the way to the sprint goal
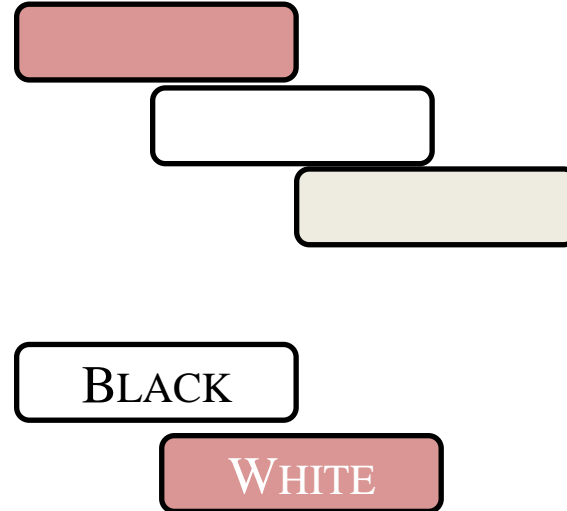
- **MokUp**
  - Corporate Design based on three colors:
    - pink
    - white
    - light grey
    - Font:
      - black
      - white

- **MokUp**
  - Defined GUI-Elements
    - Buttons

      CLICK ME

    - Tables
      - Header

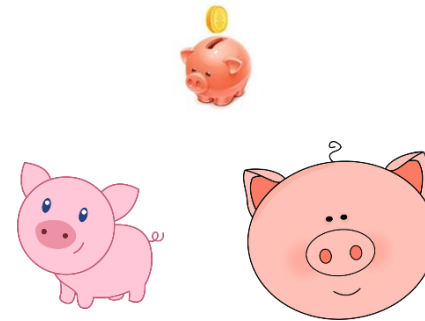 | COLUMN | COLUMN |
        | --- | --- |
        | DATA | DATA |

      - Data
    - 1x Dropdown Box
      - Category on EditView
    - 1x Undefined very fancy element to choose different reports

Impediments:

- **Pigs!** We need more pigs…

- **User Stories**:
    - Dependencies regarding developments.
        - I.e. activity *register* needs to be finished before work on activity *login* can start.
    - ➤ Reduce scope of user stories, so that one developer can work individually on one user story.
        - User stories will be recombined via Epics in ScrumDesk
    - ➤ Furthermore the impediment adapted to the commonly used android app
        - Technical resolution is based on interfaces