

Software Requirements in Scrum



September 2024



Agenda

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- 03 Software Development Methodologies

- 04 Product Requirements: definition, types and lifecycle

- 05 Requirements in Scrum

- 06 Our project: overview and artifacts

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MARYNA UDOD

Business Analyst at EPAM

Experience:

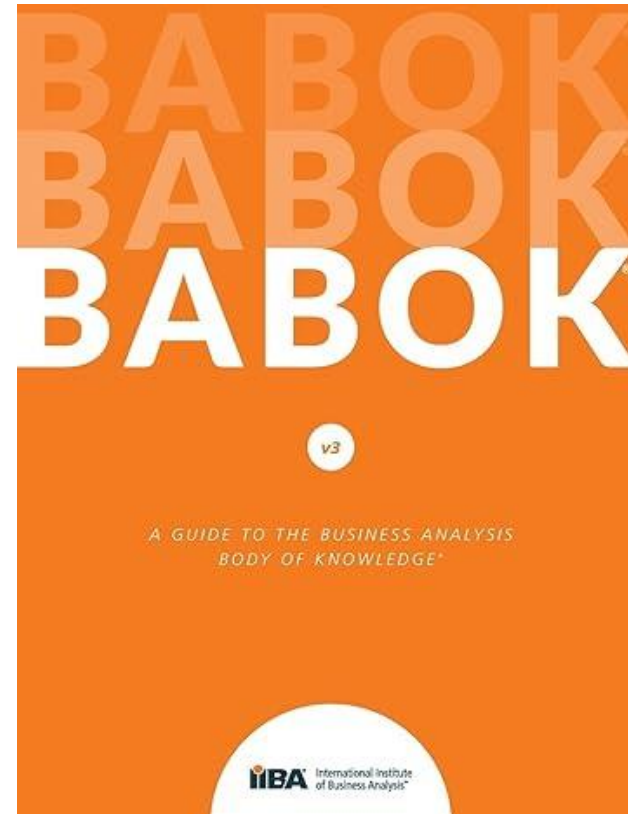
- 2 years as a BA
- Domains: Retail & distribution, Healthcare, Software & Hi-Tech



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BUSINESS ANALYSIS – WHAT IS THIS?

Business Analysis is the practice of enabling change in an organizational context, by defining needs and recommending solutions that deliver value to stakeholders.



BUSINESS ANALYST ROLE

A **Business Analyst** is any person who performs business analysis tasks described in the BABOK® Guide, no matter their job title or organizational role.



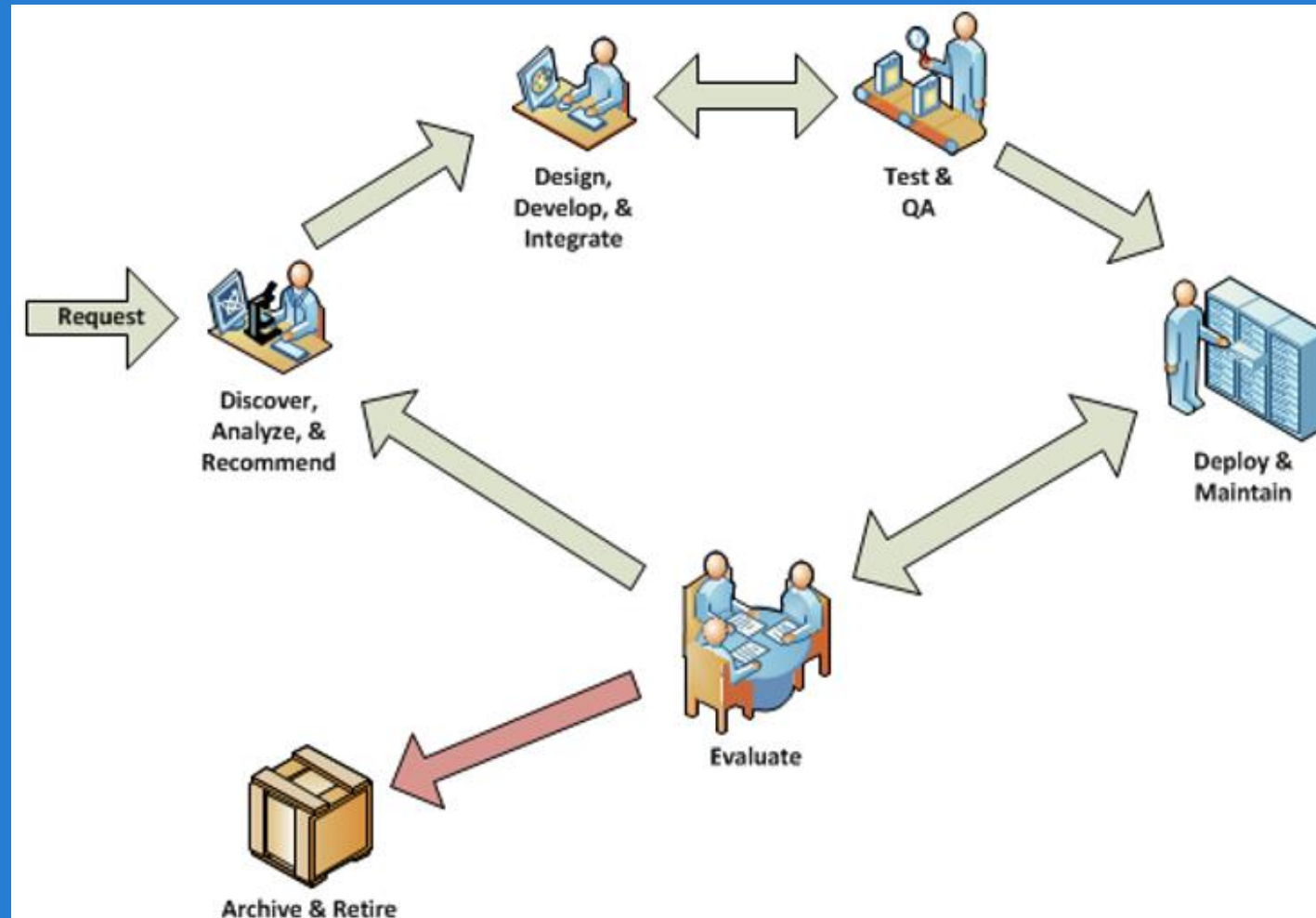
BUSINESS ANALYST SKILLSET



Software Development Methodologies

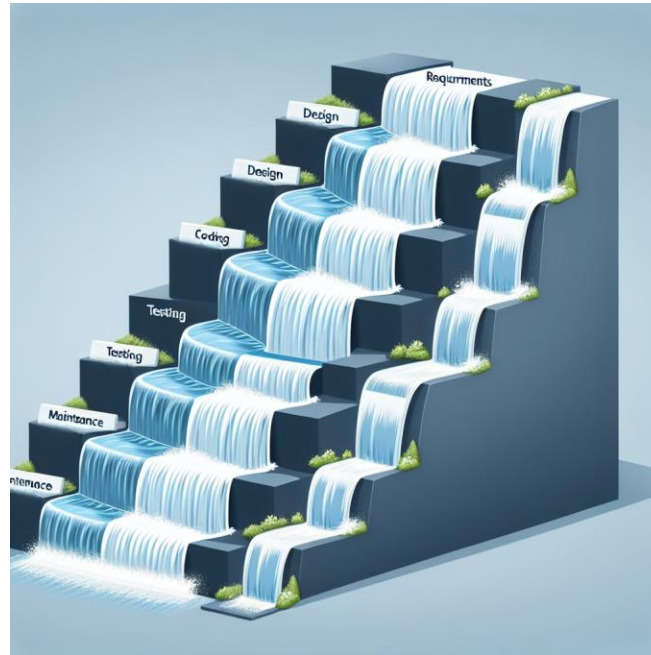
SDLC, Software Development Methodologies overview

SOFTWARE DEVELOPMENT LIFECYCLE



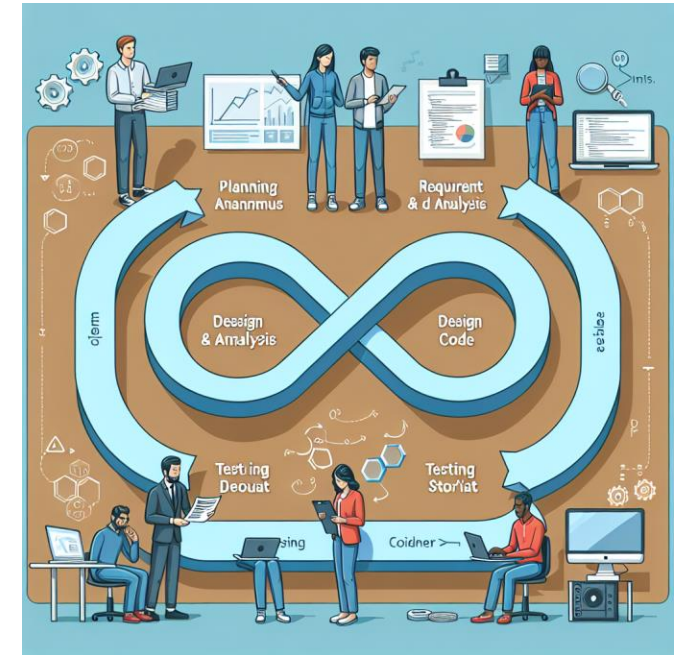
Waterfall

- »»» Linear, sequential approach
- »»» Clearly defined phases
- »»» Each phase must be completed before the next begins
- »»» Less adoptable to changes

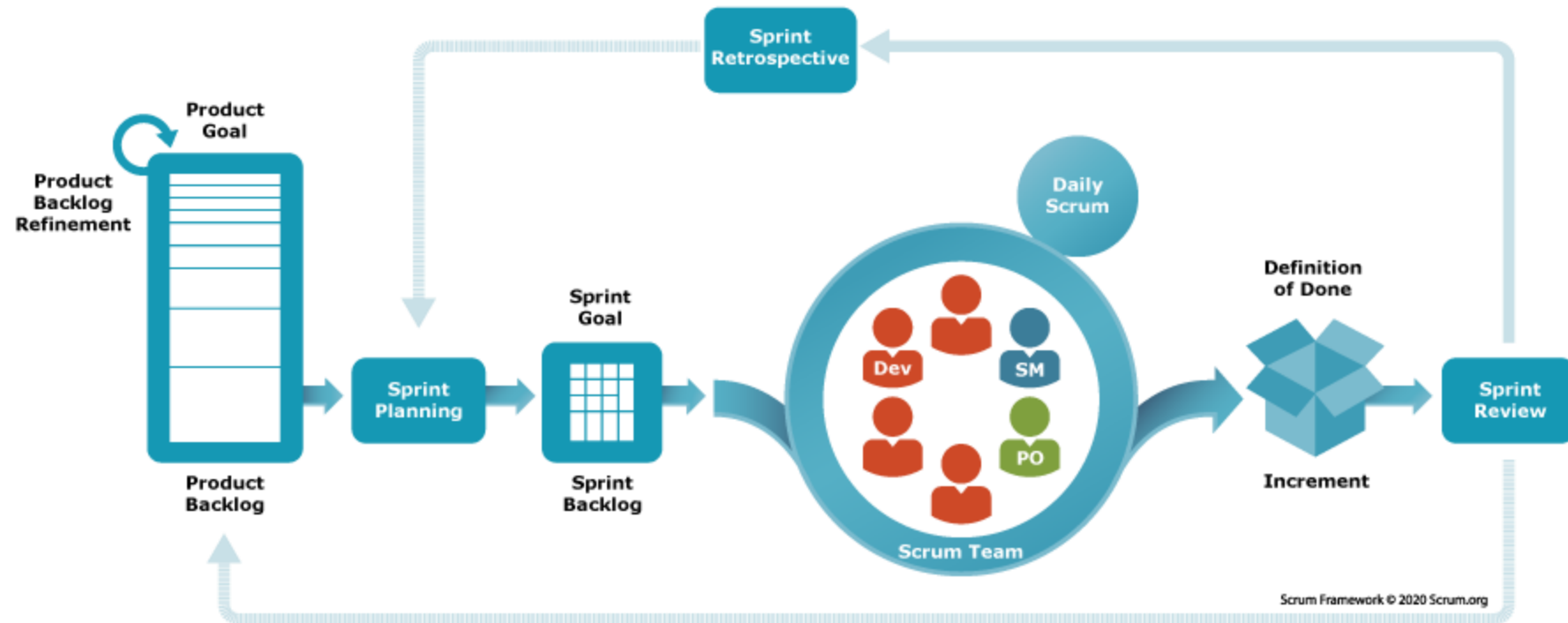


Agile

- » Iterative progress over extensive documentation
- » Focuses on delivering small, functional increments rapidly



SCRUM OVERVIEW



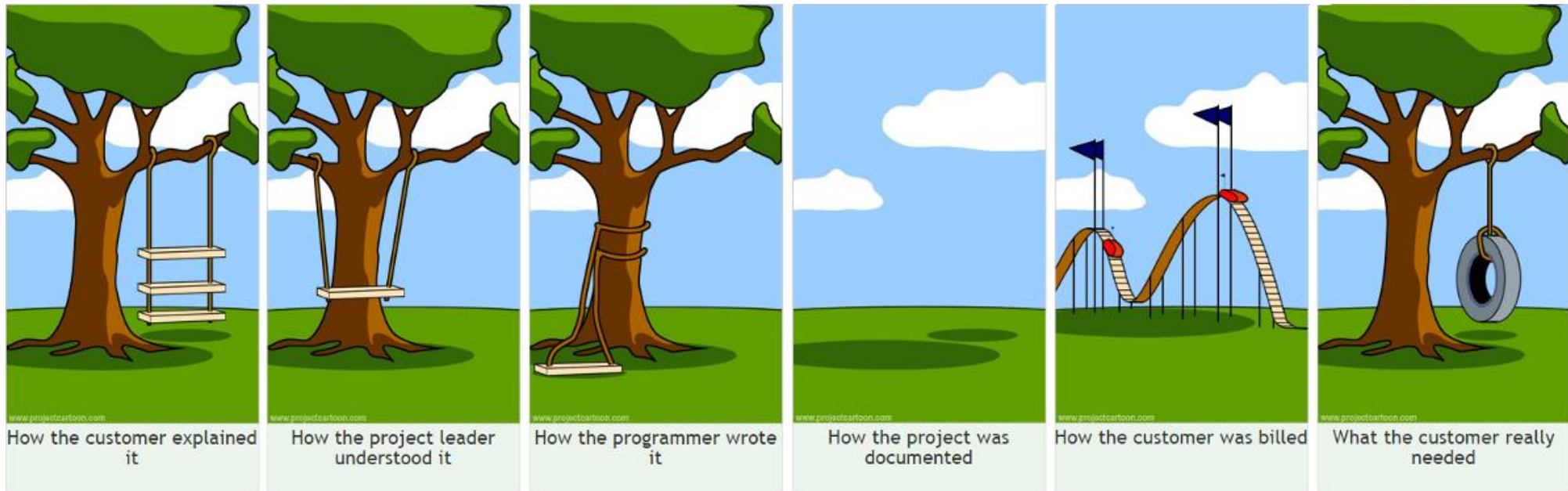


Product Requirements: definition, types and lifecycle

PRODUCT REQUIREMENTS

According to the Business Analysis Body of Knowledge (BABOK), a requirement is:

1. A condition or capability needed by a stakeholder to solve a problem or achieve an objective.
2. A condition or capability that must be met or possessed by a solution or solution component to satisfy a contract, standard, specification, or other formally imposed documents.
3. A documented representation of a condition or capability as in (1) or (2).



WHO ARE STAKEHOLDERS?

- ❖ Someone with an **interest in the outcome of a project**, either because they have funded it, will use it, or will be affected by it.

The Scrum Primer (Deemer, Benefield, Larman, & Vodde, 2010)

- ❖ A group or person who **has interests** that may be affected by an initiative or have influence over it.

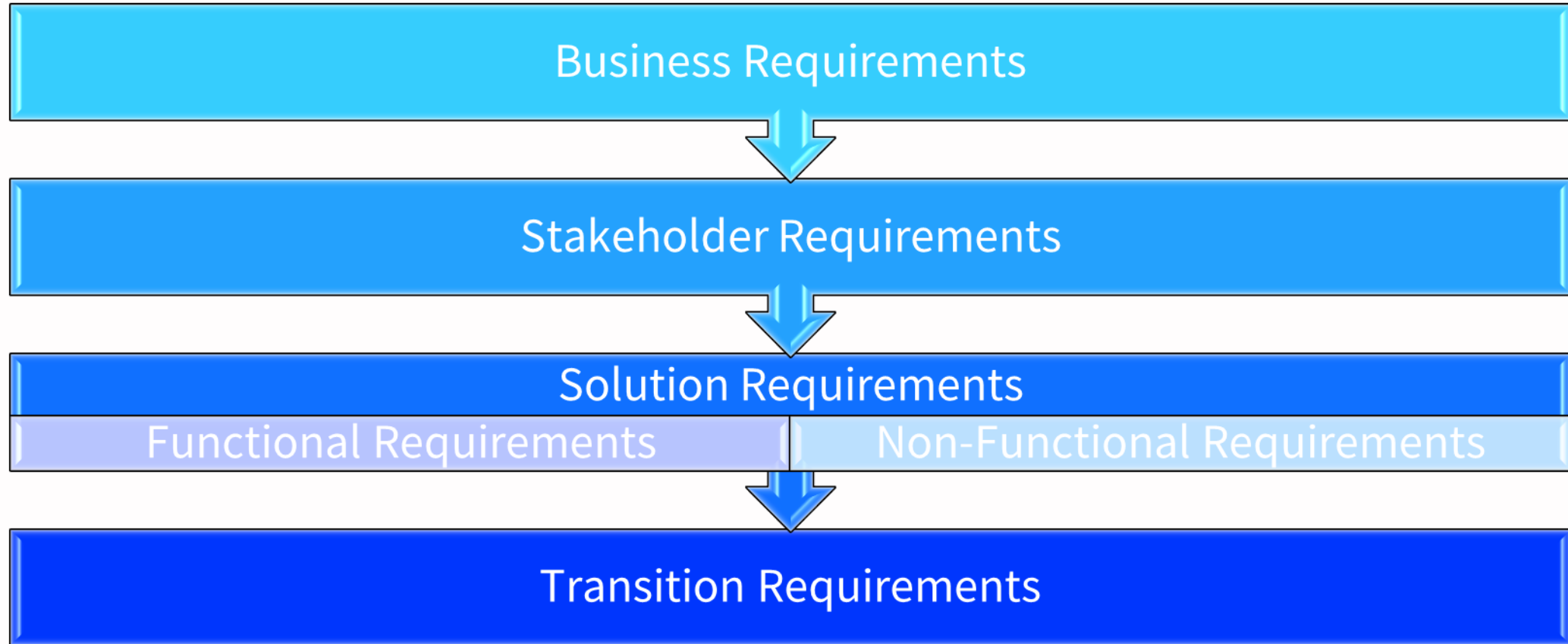
A Guide to the Business Analysis Body of Knowledge® (BABOK® Guide)

(International Institute of Business Analysis, 2009, p. 232)

Stakeholders

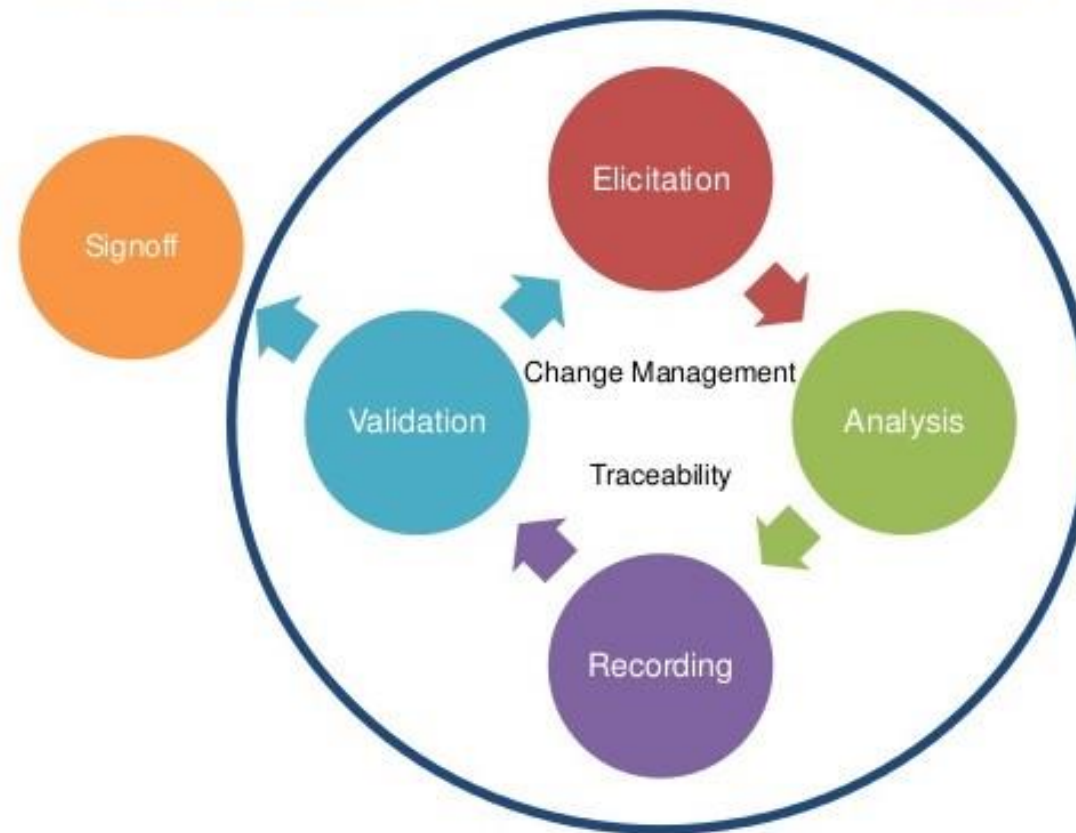


SOFTWARE REQUIREMENTS TYPES

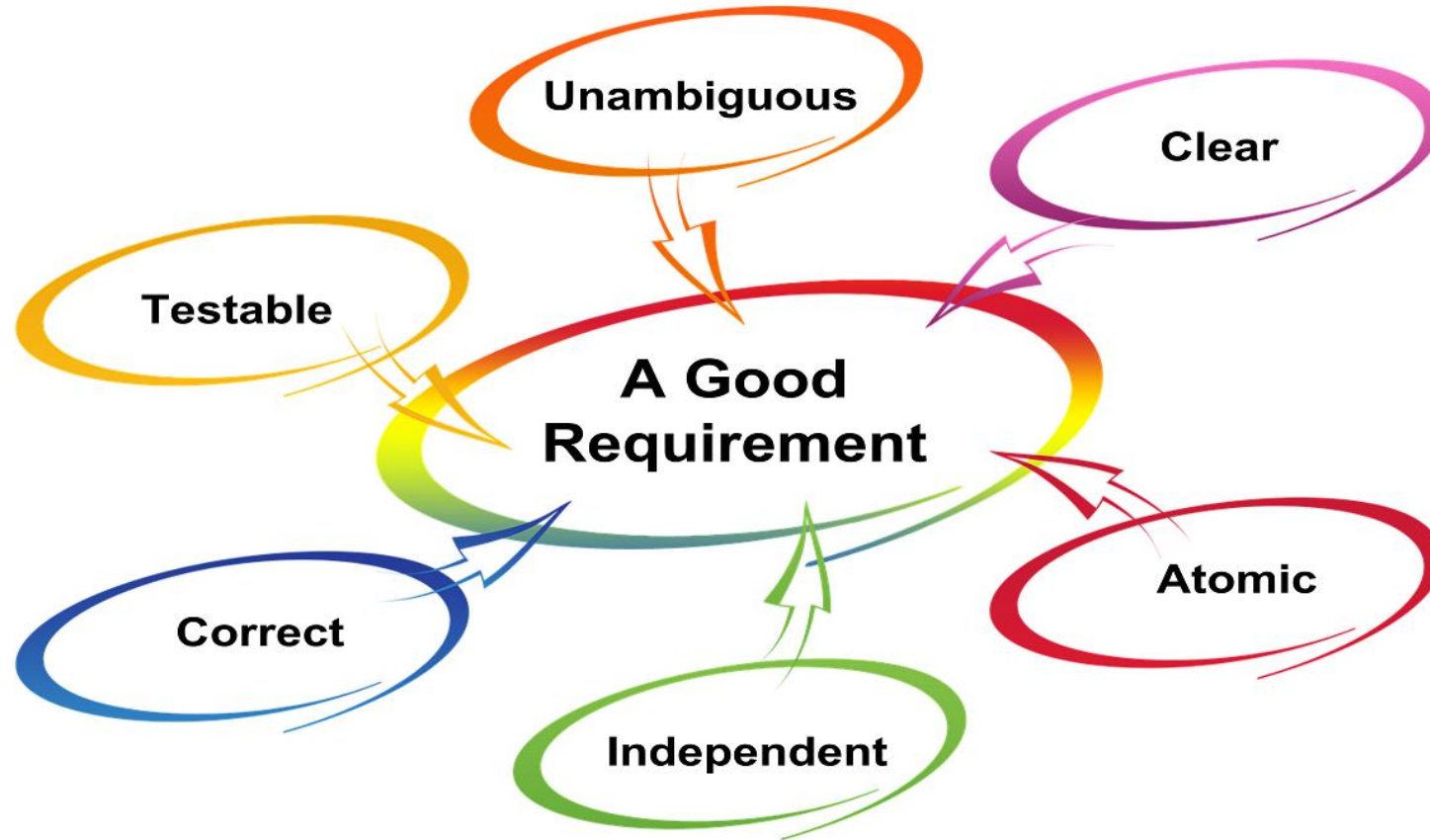


REQUIREMENTS LIFECYCLE

REQUIREMENTS MANAGEMENT PROCESS



CHARACTERISTICS OF GOOD REQUIREMENTS



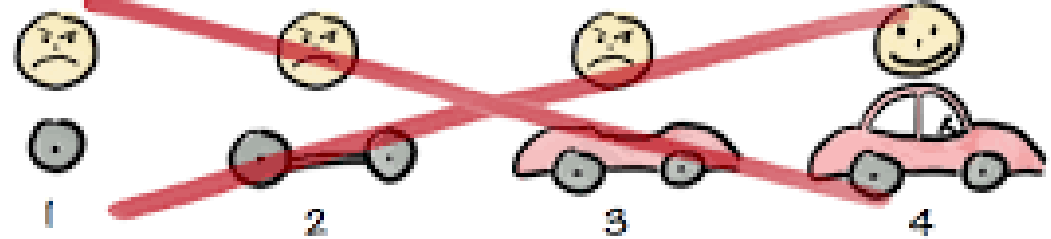
DECOMPOSITION



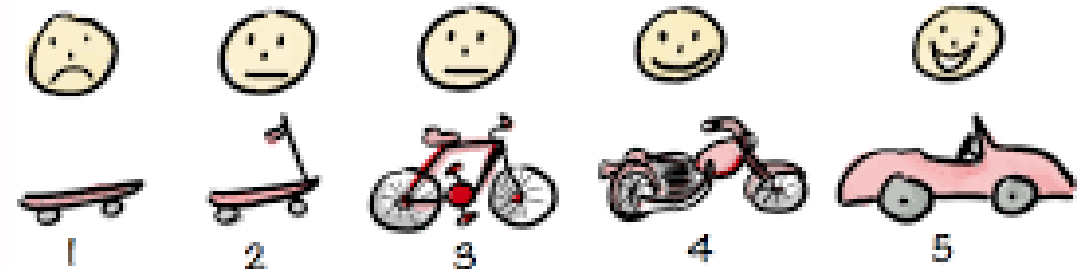
MVP

A Minimum Viable Product (MVP) is a basic version of a product that covers core requirements and needs of a customer, excluding “nice to have” functionality.

Not like this....



Like this!



PRIORITIZATION

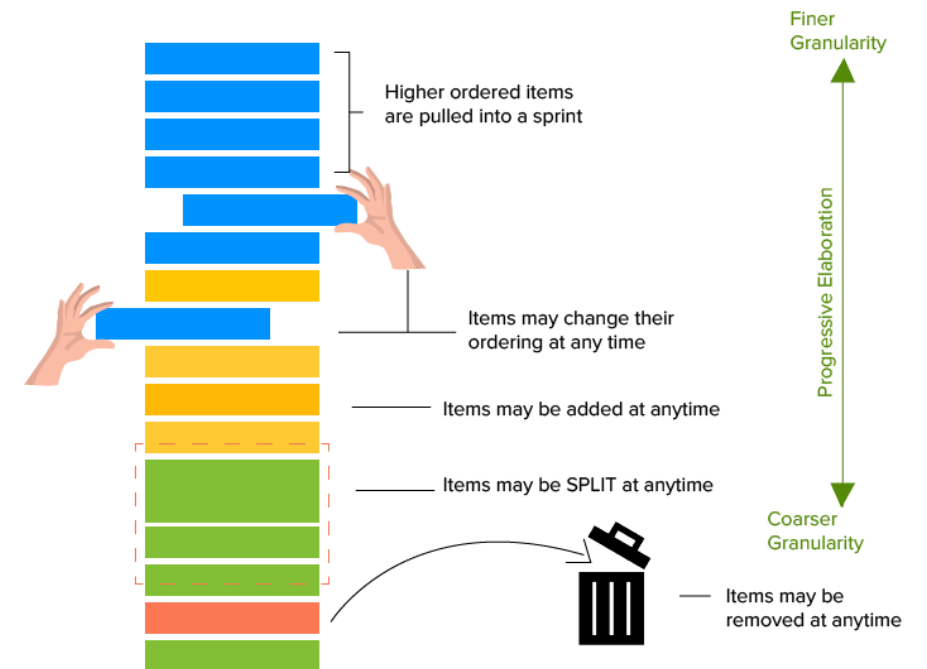




Requirements in Scrum

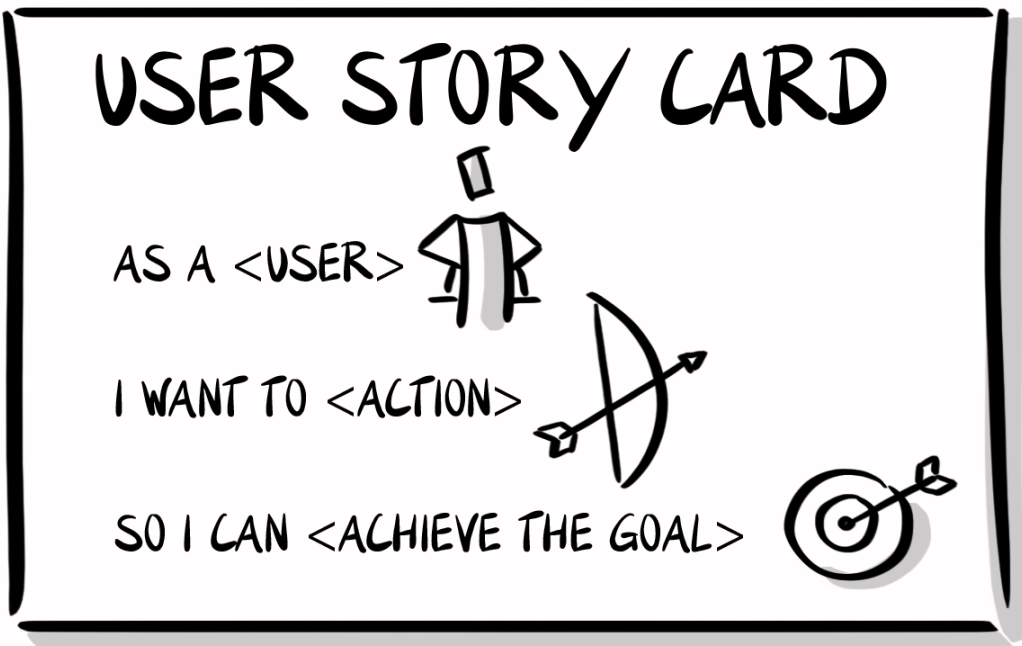
In Scrum, Requirements are Articulated as User Stories within the Product Backlog

Product Backlog is an ordered list of everything that might be needed in the product, providing a single and accountable source of requirements in Scrum.



USER STORIES

Short, simple description of a feature from the user perspective, focusing on the value delivered to the user and fostering better communication.

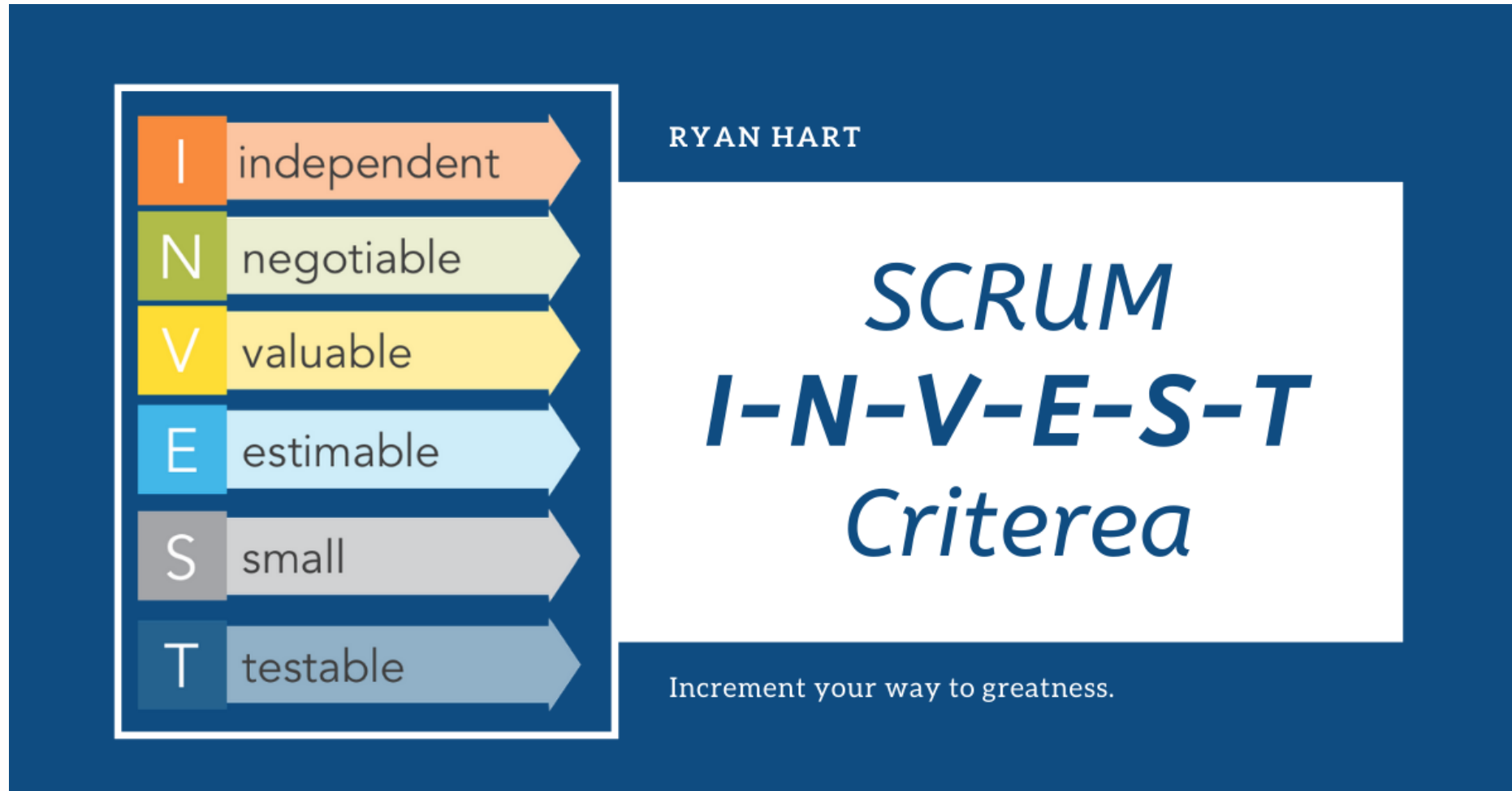


*"As a **customer** I want to **see recent orders in my account** so that I can track the order and know when it will arrive.*

Acceptance Criteria:

- *List of orders for past 12 months (sorted by recency)*
- *Click order to see details of the order*
- *Details include: order date, price, ship status*
- *Should have an easy return button "*

'GOOD' USER STORY



OUR PROJECT: overview and artifacts

OUR PROJECT REQUIREMENTS DEFINITION

WHAT BUSINESS WANTS?

Develop a product which can demonstrate the complete software development lifecycle (SDLC) to IT marathon participants.

Key Business Goals

1. Demonstrate the full SDLC in an educational and engaging way
2. Ensure the product is reproducible by participants, regardless of their technical background
3. To provide an opportunity for students to finalize the project, materials from which they will be able to use for their diploma
4. Provide ability for students to prepare the working project which they could add to own portfolio



WHAT STAKEHOLDERS WANT?

Marathon Organizers

1. Interested in Project Educational Value
2. User-Friendly Interface
3. On-Time Delivery
4. Scalability

Development Team

1. Minimal Viable Product (MVP) Approach
2. Efficient Resource Use
3. Simplicity in Design
4. Reusable Components

End Users

1. Learning-Focused Product
2. Hands-on Reproducibility
3. Interactive Challenges

OUR PROJECT INITIATION PROCESS

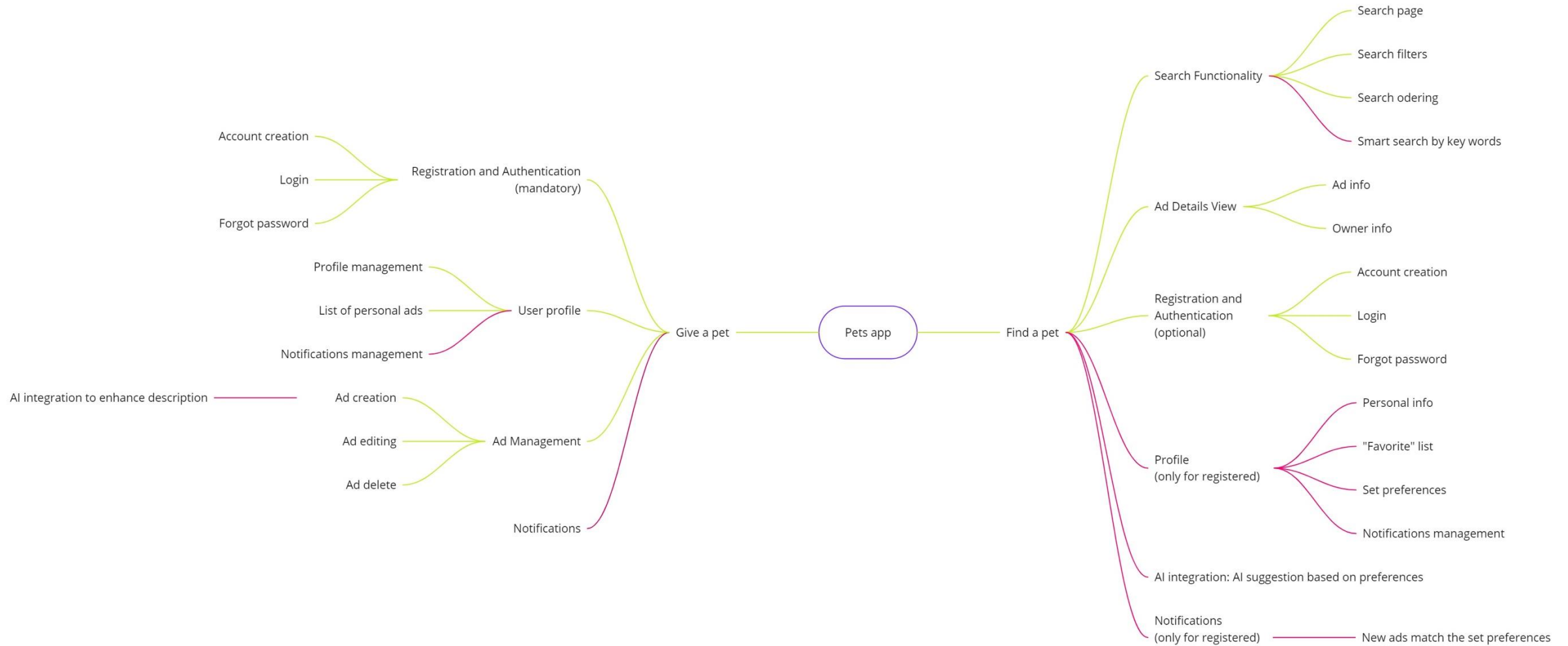


PET WORLD PROJECT OVERVIEW

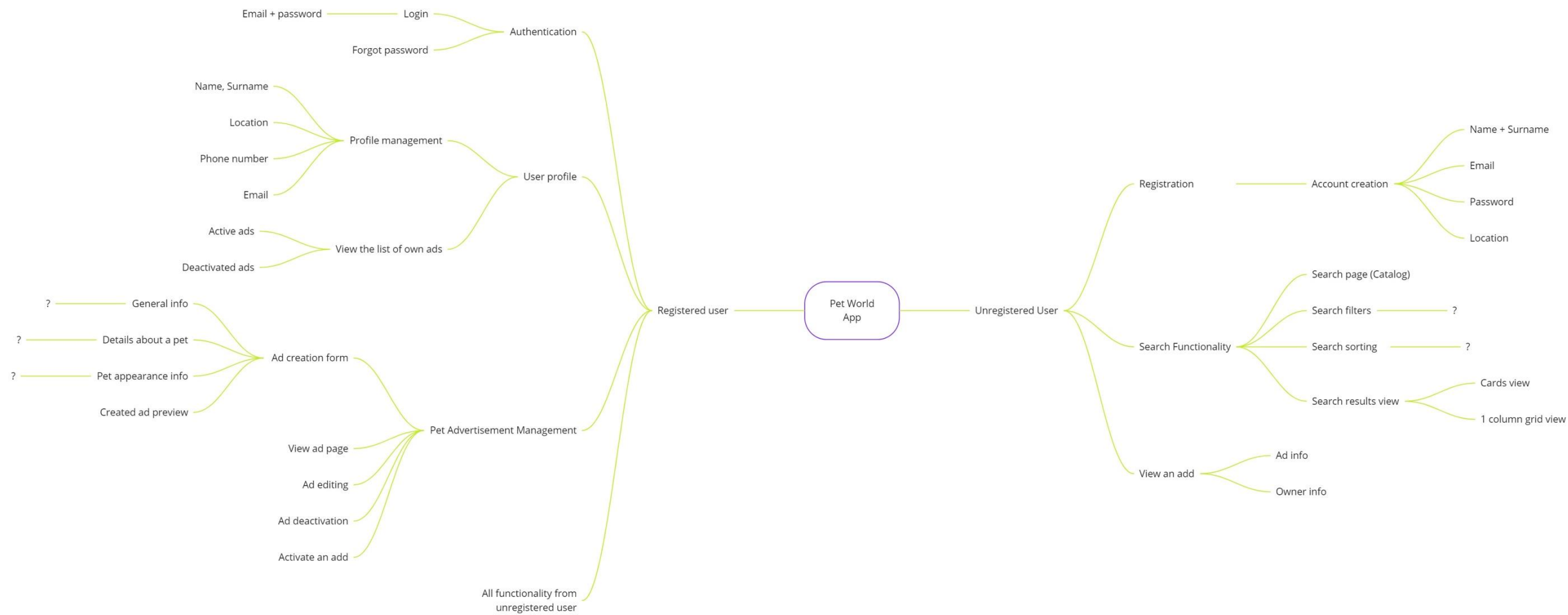
- ❖ Web application which allows to find a pet and/or find an owner for your pet
- ❖ Registered and non-registered users can review published ads
- ❖ Users can sort and filter pets by several filters
- ❖ Only registered users can publish an add
- ❖ Registered users can manage personal information and adds in the own account



PROJECT DECOMPOSITION: INITIAL IDEA



PROJECT DECOMPOSITION: READY TO GO



USER STORY EXAMPLE

US31. Implement search page

User Statement

As a Pet World user

I want to have a search page

So that I can find pets I'm interested in quickly and in my preferred format

A/C:

1. The search page accessible via:

- "Add" link on the footer
- "Search" button on the Homepage

2. The search page contains a catalog with active ads

3. Ad card displayed with such attributes:

- image
- title
- description (for the vertical cards view only)
- location
- gender
- age
- price

4. By default ads are displayed sorted starting from the newest

5. There is ability to choose between two catalog views of the search results:

- Small Cards View: Displays ads in a 3-column grid
- Vertical Cards View: Displays ads in a vertical 1-column grid

6. The default catalog view is set to the Small Cards View.

7. Pagination:

- Up to 9 ad cards is displayed on a single page.
- If the number of ad in the catalog exceeds the number of ads that can be displayed on a single page, there is a pagination at the bottom of the search results.



Let's check what we have finally!

TASK TO DO

Complete provided Pet World App feature decomposition with the decomposition of the following features:

1. Search filters
2. Search sorting
3. Ad creation form

Note: make sure you consider the dependency between search functionality and ad creation form.



Q&A



Thank You