Intro to scrum for semester project

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Intro to Scrum Iterative learning

User story

- AS A Software Engineering student
- I NEED to learn the essential aspects of scrum
- SO THAT I can submit the semester project requirements and a release plan for the product by 5th of March 2024

Acceptance criteria

- Product vision is described, stating who the product is for, what the need is, what the product name is and what the unique benefits of the product are
- High level customer requirements are listed
- Release plan includes estimated timing of releases to market
- Submitted no later than 5th of March 2024
- Deeper understanding of scrum and business aspects comes from the SE course week 8-10 and 14-15





Scrum

Why do we apply an iterative way of working?

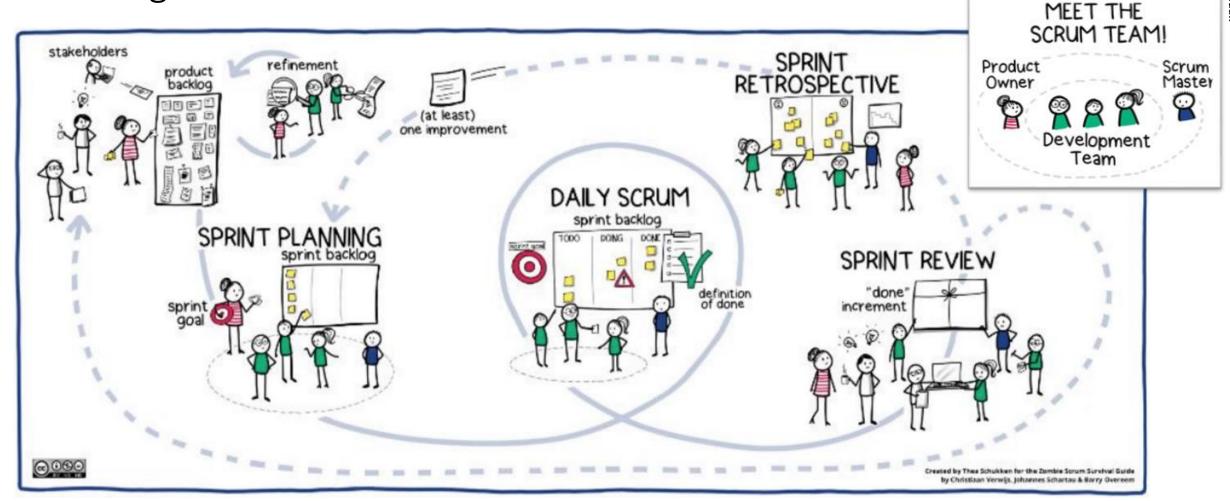
- Many unknowns in development of a new product
 - What is the problem/need?
 - How do we solve it best?
 - Who are the customers?
 - How do we monetize the value of the product?
- We make assumptions for the unknowns
- Then we validate the assumptions
- And adjust based on learnings
- Outcome
 - Efficiently hitting the target





Scrum

An agile framework





Scrum Team

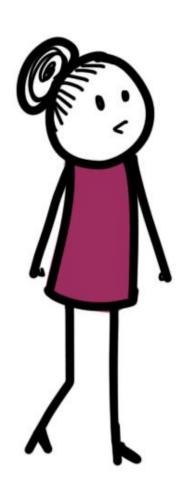
- Responsible for all product-related activities (stakeholder collaboration, verification, maintenance, operation, experimentation, R&D, etc.)
- Accountable for creating a valuable, useful Increment every Sprint
- Self-managing / Self-organizing (decides who does what, when, and how)

MEET THE SCRUM TEAM! Product Scrum Master Owner Master

Development

Scrum Scrum Team – Product Owner (PO)

- Accountable for maximizing the value of the product throughout its lifecycle, resulting from the work of the Scrum Team
- Provides clarity about a product's vision and goal
- Manages/owns the Product Backlog
 - Identifies new backlog items based on customer insight
 - Prioritizes backlog items to maximize value
 - Ensures a shared understanding of the backlog
- Manages stakeholders (internal, external, users)





Scrum Scrum Team – Scrum Master (SM)

- Accountable for establishing scrum and for the scrum team's effectiveness
- Helps the team to succeed
- Removes impediments to the Scrum Team's progress
- Ensures that all Scrum events take place and are positive, productive, and kept within the timebox





Scrum Team – Developers (Dev-Team)

- Committed to creating any aspect of a usable Increment each Sprint
 - Increment is a concrete stepping stone toward the Product Goal
 - Outcome of Increment is presented at sprint review
- Accountabilities
 - Planning the sprint
 - Committed to deliver a done increment
- Activities within the Dev-Team
 - Software development
 - Architecture
 - Design
 - Test
 - Mentoring, teaching, facilitation, coaching







Product vision Defining the target

Write down your ideas and create a Product Vision for your project

- FOR (target customer)
- WHO (statement of the need or opportunity)
- The (PRODUCT NAME) is a (product category)
- THAT (key benefit, compelling reason to buy)
- UNLIKE (primary competitive alternative)
- OUR PRODUCT (statement of primary differentiation)

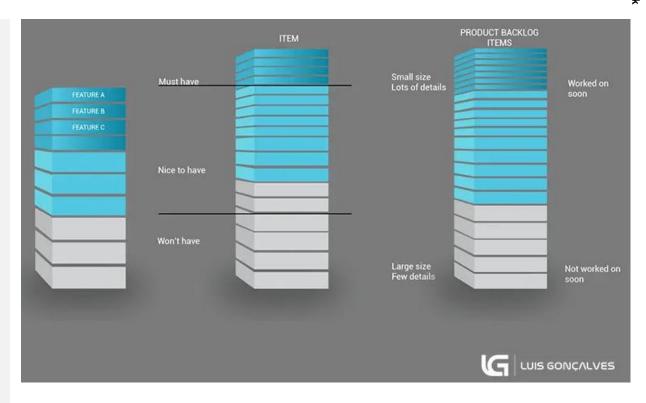
Example

FOR a mid-sized company's marketing and sales departments WHO need basic CRM functionality, THE CRM-Innovator is a Web-based service THAT provides sales tracking, lead generation, and sales representative support features that improve customer relationships at critical touch points. UNLIKE other services or package software products, OUR product provides very capable services at a moderate cost.



Scrum Product Backlog

- Prioritized list of product features that can be delivered within a sprint by the scrum team
- PO continuously improves contents
 - New features captured from stakeholders
 - Refine how feature is creating maximum customer value
 - Continuously prioritize features
 - Must Have
 - <u>S</u>hould Have
 - <u>Co</u>uld Have
 - Won't Have for now
- Describe features in User Story format
 - As a <user type>
 - I need <what feature>
 - So that <why is it valuable>
 - + further descriptions, notes etc





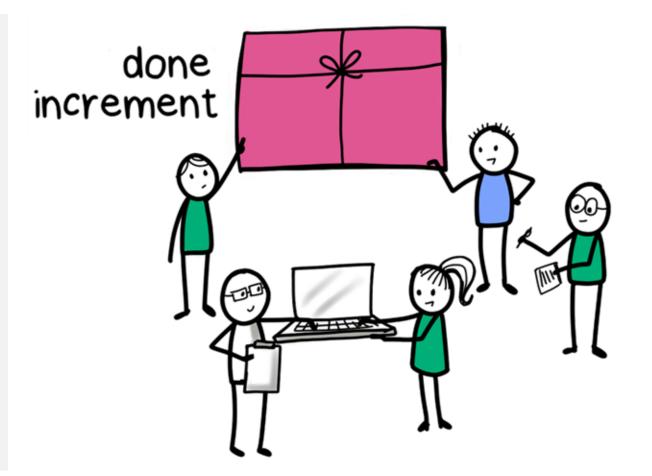
Scrum Release planning

- Which features to work on in the upcoming sprints
 - Mapping user stories from the prioritized backlog into increments towards product goal
- Provide an approximate date for release of the product
- Estimation of features / user stories
 - Planning poker
- MVP Minimum Viable Product
- MMP Minimum Marketable Product



Scrum The Sprint

- Sprints are the heartbeat of Scrum
- Team works on one or more Product Backlog Items
- Outcome of sprint is a usable and potentially releasable – increment of the product towards the product goal
- Fixed length periods of work (2-4 weeks)





Intro to Scrum

Done? Recap on the user story and acceptance criteria

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