Practical Agile for Software Product Management

Concepts, Techniques, and Tools to Develop and Manage Market-Fit Software Products

Module 1 Introduction to Agile and Scrum

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May. 2023

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What You Will Learn

Introduction to Agile Development **Introducing Scrum** Start to Build Your Team 3 Start to Manage Your Software Product

Before Start: Agility vs Speed

Speed is the ability to move in a straight line as fast as possible, while agility is the ability to change direction quickly while maintaining speed and precision



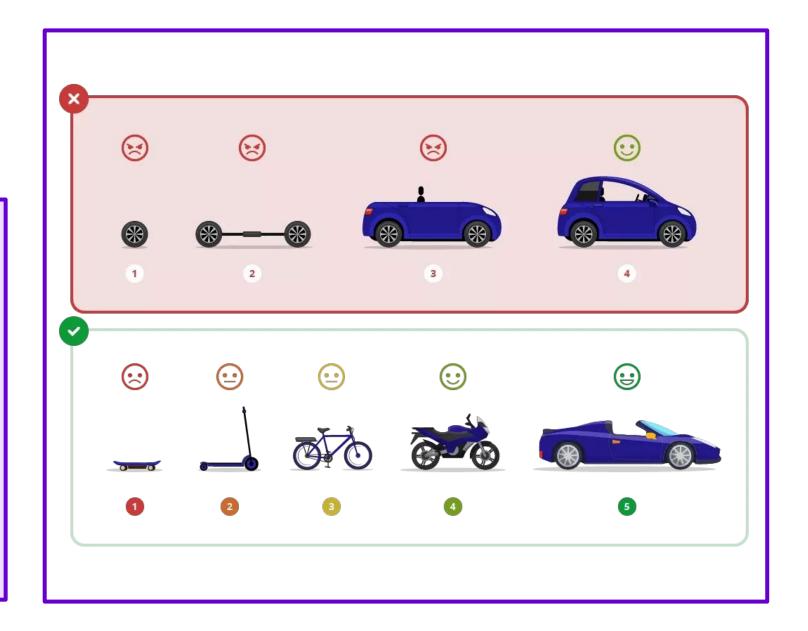
Before Start: Lets Review Some Basics!

In terms of project management perspective, what are the main differences between a Computer Program and a Software Product?

A Million Dollar Question

How should we develop for Rapidly Changing Markets?

How could we deliver high-quality, Functional software products in a short amount of time?



So, Why do we need to be Agile?

Rapidly changing market needs

You need to be flexible and align yourself with frequent customer requirements changes.

You have to deliver high-quality and functional products fast (strictly time-bounded).

An Other Million Dollar Question!

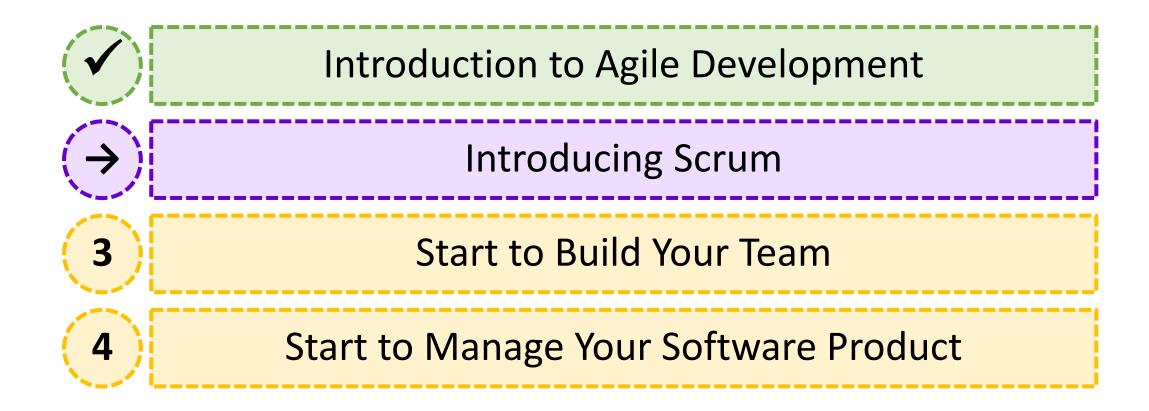
How should (could) be Agile in Software Development?

(One of) the answers is:

Scrum Framework

Scrum is a framework that defines the principles (guidelines) of agile product development

What You Will Learn



What Is Scrum?

Scrum is one of several frameworks for managing product development organizations, lumped under the broad category of agile software development

Agile approaches are designed to support iterative, flexible, and sustainable methods for running a product engineering organization.

When should we use Scrum?

Scrum is particularly well suited to the types of organizations that develop products such as websites and mobile software

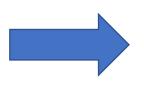
The focus on developing cohesive, modular, measurable features that can be estimated relatively, tracked easily, and that may need to adapt quickly to changing market conditions makes scrum particularly appropriate for these types of projects.

A software production line! (Software Development Life Cycle-SDLC)

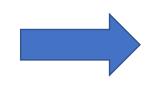
1. Plan

2. Analysis 3. Design











Product owner

Product manager

Project manager

Software architecture

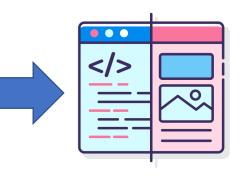
UI/UX Designer

Technical Designer

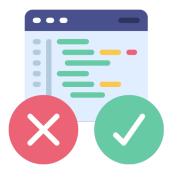
A software production line! (Software Development Life Cycle-SDLC)

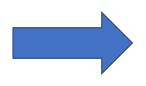
4. Implementation 5. Test

6.
Deploy / Maintain











DevOps

Engineers

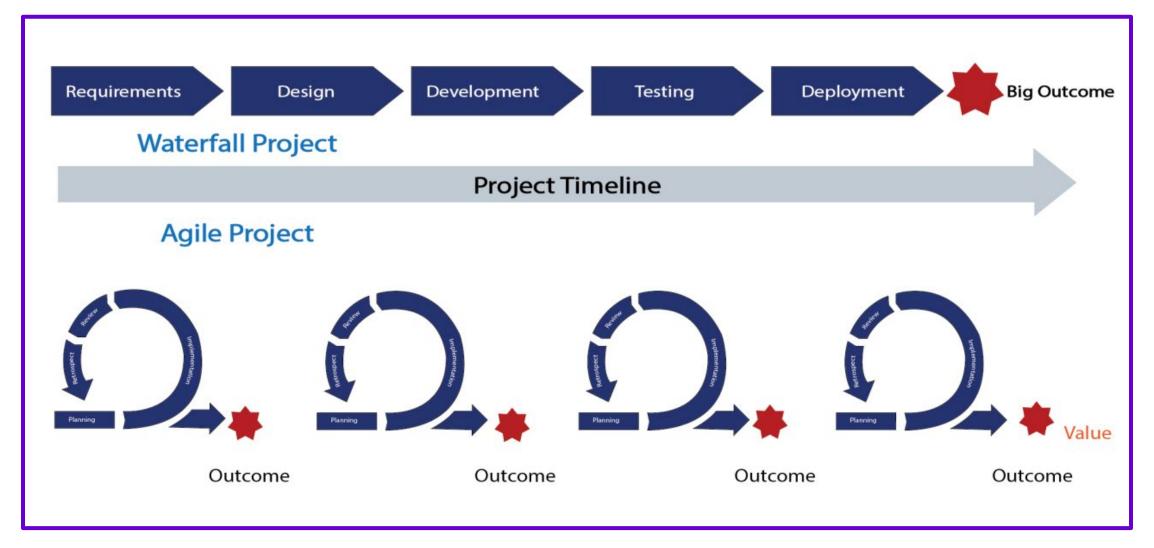
Front-end, Back-end, full-stack Developers



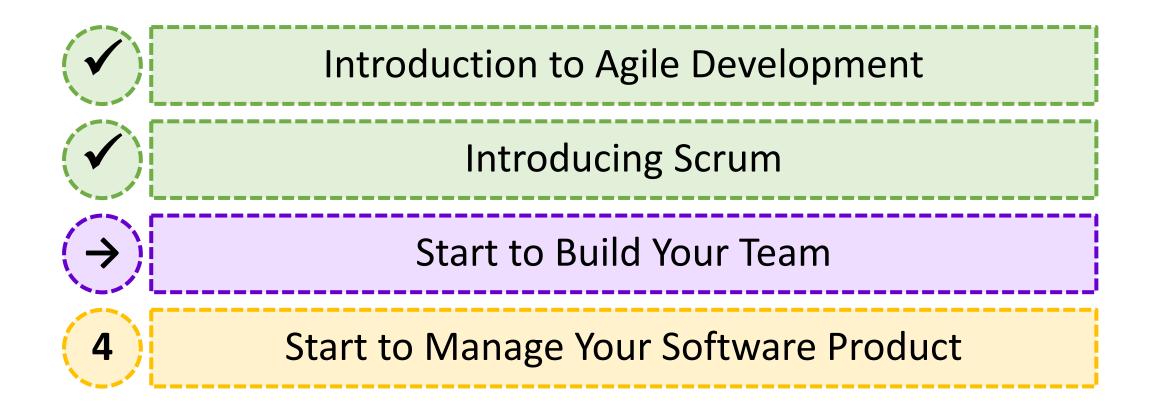
QA Engineers Web Masters

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Comparing Scrum and Waterfall



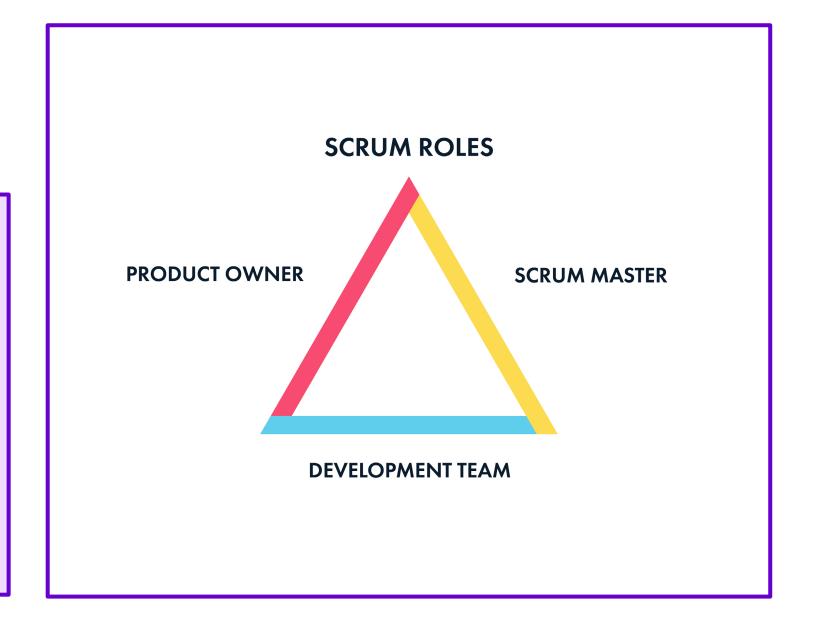
What You Will Learn



Build Your Team:

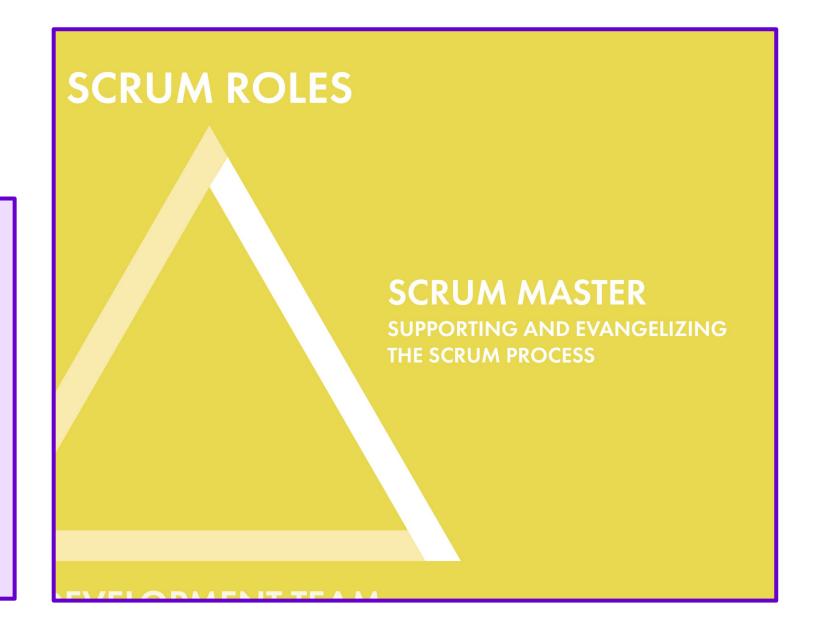
Establishing Who Does What

There is no hierarchy in a Scrum team. The Scrum roles are all equal as far as the process is concerned.



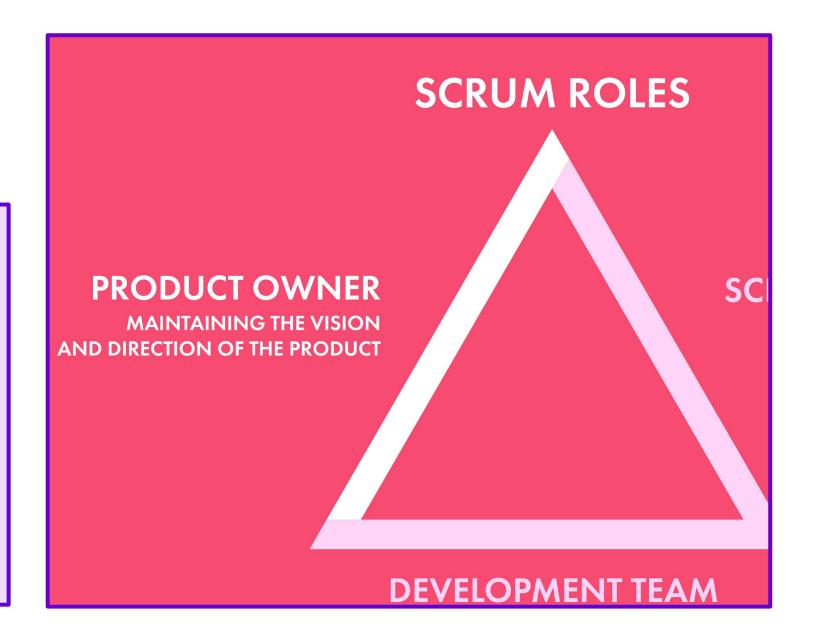
Build Your Team: Scrum Master

The scrum master has no authority other than the leadership demonstrated in the role of servant leader for the scrum process



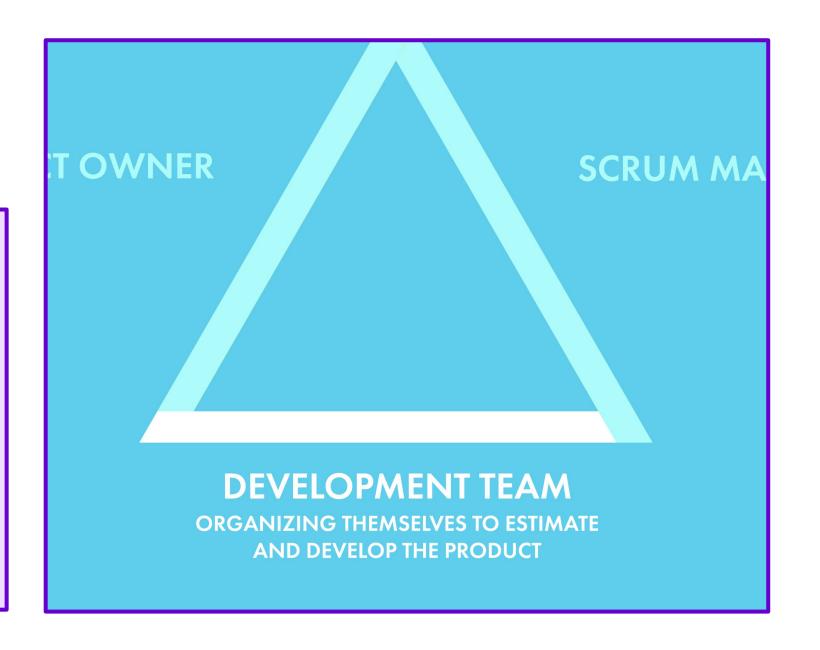
Build Your Team: **Product Owner**

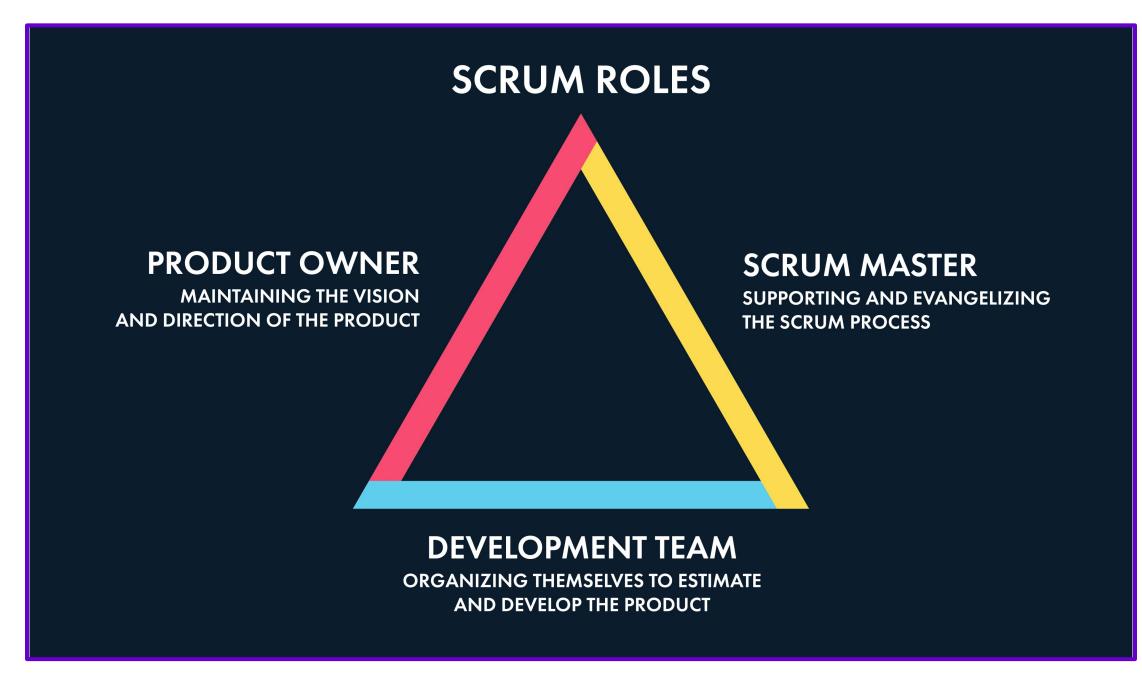
The product owner has no authority other than maintaining the vision of the product and shepherding it through the scrum process



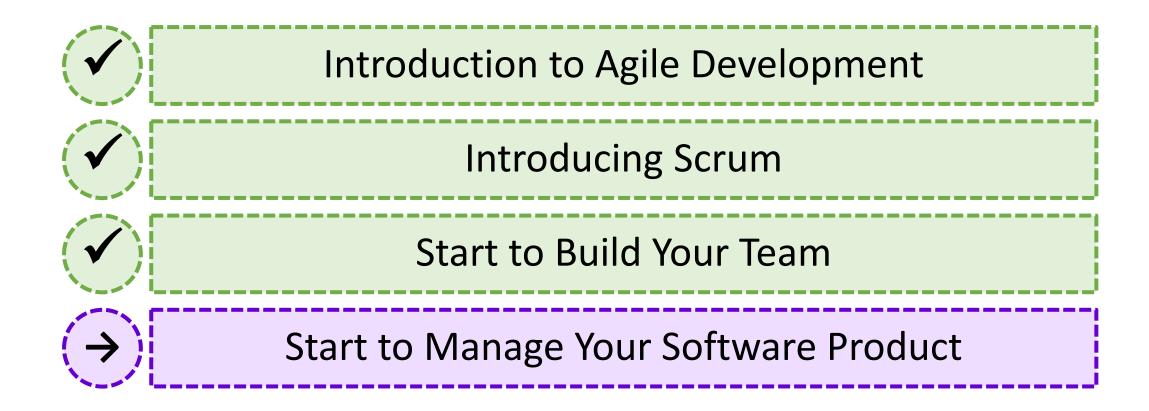
Build Your Team: **Dev Team**

And the team has no authority other than the power to estimate, accept, reject, commit to, work on, and complete stories





What You Will Learn



Define Requirements

Stories are how the product owner communicates to the development team what needs to be developed

Stories Examples

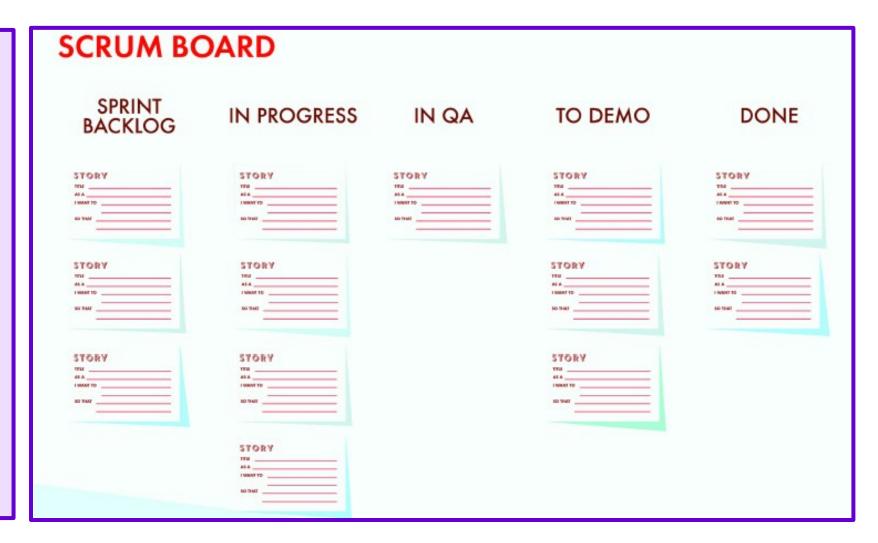
"As a customer, I want to be able to see a bill, with all of the items in that order, so I can see how much my order will cost."

"As a customer, I want to be able to select a "pay now" option when I view my bill, so I can pay the bill immediately."

"As a customer, I want to be able to enter my payment details for VISA and MasterCard credit cards, so I can pay using a convenient method."

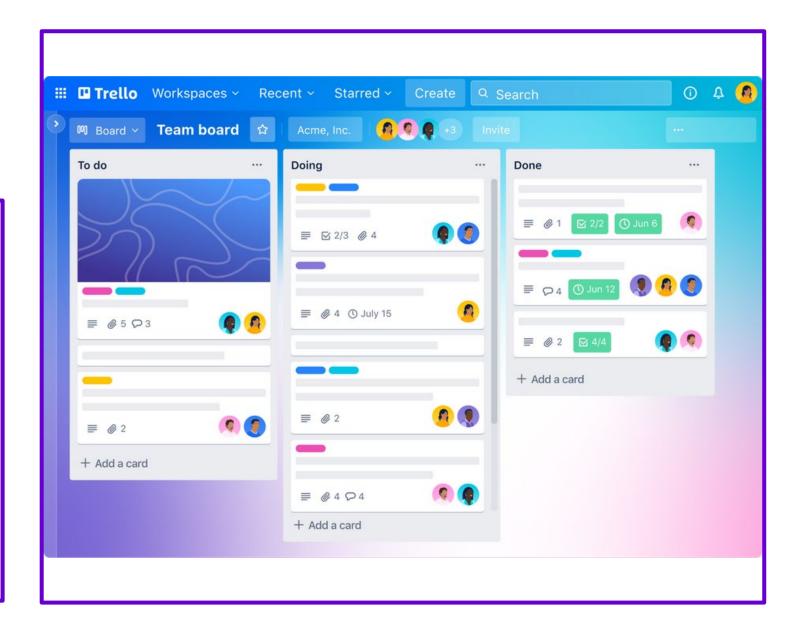
Manage Your Stories

A scrum board tracks the progress of all the stories being worked on in the current sprint until it meets the team's definition of done.

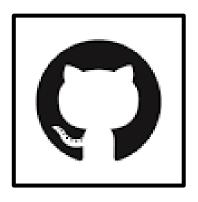


How to manage our Tasks (Stories)?

Use a task management tool like Trello or just a wall and sticky notes!



Access to Course Resources



https://github.com/samanipour/ Practical-Agile-for-Software-Product-Management.git

References

- [1] Green, M. D. (2016). Scrum: Novice to Ninja: Methods for Agile, Powerful Development, SitePoint.
- [2] Ockerman, S. and S. Reindl (2019). <u>Mastering professional scrum: A practitioner's guide to overcoming challenges and maximizing the benefits of agility, Addison-Wesley Professional.</u>
- [3] Martin, R. C. (2019). Clean Agile, Pearson Education.
- [4] Hall, G. M. (2017). <u>Adaptive Code: Agile coding with design patterns and SOLID principles, Microsoft</u>
 - [۵] سامانیپور، علی. (۲۰۱۸). <u>آموزش اسکرام برای مدیریت چابک فرایند توسعه اپلیکیشن های وب و موبایل،</u> <u>فرادرس</u>