

# Better Software Products

# Better software

Projects can always be done better. How to make better software products?

- how to work with your clients?
- how to organize a team of developers?
- how work with a development team?
- How to improve the project management?

Technical skills you can be better at:

- platforms,
- languages and tools
- ... there's so much more.

## Quiz 1/2

Select the people who you think typically compose a software development team

- A. Programmers, coders or developers.
- B. Clients.
- C. User interface specialists and graphic designers.
- D. Quality assurance specialists or testers.

## Quiz 2/2

Select the people who you think typically compose a software development team

- ✓ A. Programmers, coders or developers.
- ✗ B. Clients.
- ✓ C. User interface specialists and graphic designers.
- ✓ D. Quality assurance specialists or testers.

### Team organization

Every development team that you will work with will be different and unique. Normally, the development team is made up of:

- coding muscle
- graphic designers
- testing personnel

# Some problems to solve 1/3

## Dev team = people with different skill sets

- How should people be organized to make great software products?
- What practices can teams follow to make the work more disciplined and less ad hoc?

## How do we manage?

- What if there are many team members to coordinate?
- What if there are lots of features to develop?
- What if the project is intended to last several years?

## Some problems to solve 2/3

### Some questions on the product

- What does a customer really want in a software product?
  - What about its quality?
  - What do they expect?
- > What processes and practices can we put in place to ensure that?

### Problems on planning (with resource constraints)

- How do we deal with changes?
- How do we handle the scope when time is limited?

## Some problems to solve 3/3

### How do we adapt to the following variation?

- For the clients, their needs might be uncertain and change over time.
- For developers, their rate of work could vary over time.
  - > There could be huge differences between the productivity of one developer versus another.

### Effective management techniques

- to deal with just these sorts of issues
- -> produce better software
- -> With “agile software development”?

# Great Product

## Key factors for a great product:

- the people involved
- the process involved

## Topics covered in this course:

- agile practices
- planning
- requirements (estimation)
- reviews and retrospectives (monitoring)



## Select the tasks of a software product manager:

- A. Interacting with clients.
- B. Managing and tracking development.
- C. Collaborating with the development team.
- D. Relaying information between the client and development team.
- E. Ensuring product quality.

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# Three important viewpoints

## Viewpoints to to understand to achieve better software

A software product manager need to understand three important viewpoints:

- The first viewpoint aims to provide the right software product for the clients
- The second viewpoint aims to have the software product done right
- The third view point aims to have the project for the product managed right

# Right Product

## What does it mean to be the right product?

- ✓ it meets the clients' needs
  - ✓ it's easy to learn and easy to use
  - ✓ it doesn't waste their time and it looks nice
  - ✓ the clients are happy with it.
- > we say that software product is validated.

## Understand users

- how to elicit their needs
- how to express software requirements

# Done Right

## What does done right mean?

- ✓ the software conforms to a specific design
- ✓ the design satisfies the stated set of requirements
- > the software product is verified

## Activities try to catch defects earlier and improve quality

- Developers can conduct reviews and tests
- to ensure that the requirements, design and implementation line up
- to avoid having the client see any defect in the released product

## To learn in this course

What are the processes to improve software quality?

# Managed Right

## What does it mean to be managed right?

The idea is to set up just enough process and suitable practices

- ✓ to organize the work of everyone involved.
- ✓ to insure that the other view points are met.
- > the software project is managed

## Activities:

- to ease communication and feedback
- so that everyone is clear on the next steps

# Making better software

## Viewpoints conclusion

Three viewpoints a software product manager needs to understand to achieve better software:

- the right product
- done right
- managed right

## Techniques and practices to create better software products:

- to ease communication and feedback
- to better understand client needs
- to organize the work of development team

> A software product manager take a central role in these activities