

DAT255 / DIT543 SOFTWARE ENGINEERING PROJECT



A man in a white lab coat is laughing heartily, his head tilted back and eyes closed. He is standing on the deck of a ship, with the ship's railing and a blue sky with white clouds in the background. The image is oriented horizontally on the page.

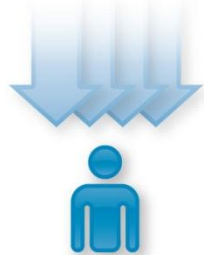
TODAY

Slicing the elephant
Feedback on backlogs

SCRUM

The Agile: Scrum Framework at a glance

Inputs from Executives,
Team, Stakeholders,
Customers, Users



Product Owner



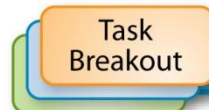
The Team



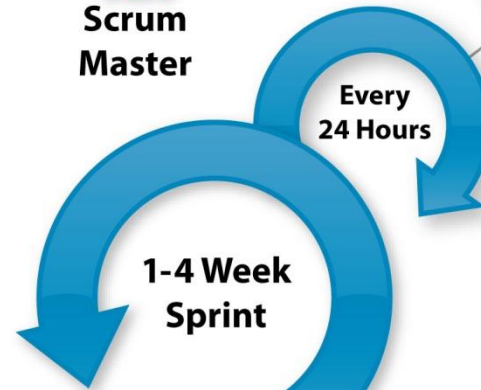
Product
Backlog

Team selects
starting at top
as much as it
can commit
to deliver by
end of Sprint

Sprint
Planning
Meeting



Sprint
Backlog



1-4 Week
Sprint

Sprint end date and
team deliverable
do not change



Scrum
Master



Burndown/up
Charts

Every
24 Hours



Daily Scrum
Meeting



Sprint Review



Finished Work



Sprint
Retrospective

STORIES

As a student, I want to purchase a parking pass so that I can drive to school.

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TODO

Coding

Test

Build

Demo

Integrate
parking pass
into
datamodel

Create
connection to
payment
service

Design
GUI for
purchase
process

Define
parking
pass
validation
scheme

SLICING

Automated Teller Machine (ATM)

Horizontal and Vertical User Stories - Slicing the Cake

Vertical User Stories

Cash Withdrawal (90% Usage)

Bank Statement

Horizontal Stories

UI - PIN and Card Reader

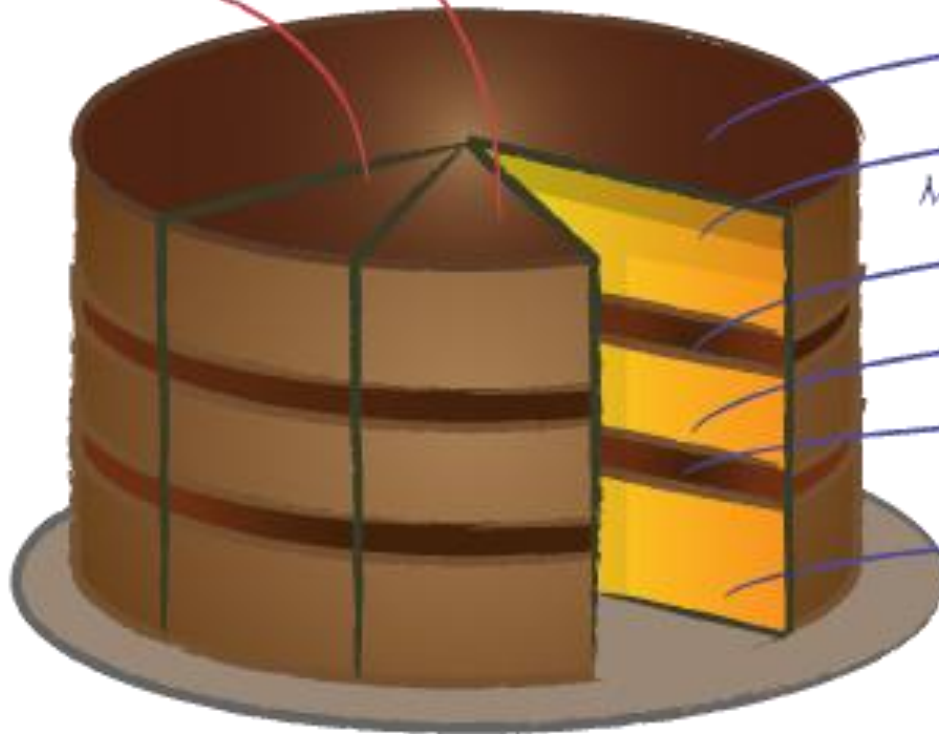
Security Layer

Middleware - Transaction Protocol

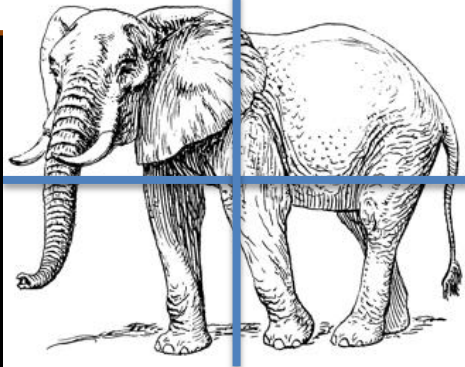
Tuxedo DB Interface

Transport Protocol

Bank Mainframe Database



As a student, I want to purchase a parking pass so that I can drive to school.



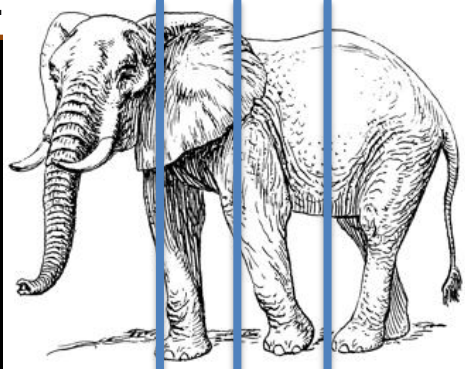
Integrate parking pass into datamodel

Create connection to payment service

Design GUI for purchase process

Define parking pass validation scheme

As a student, I want to purchase a parking pass so that I can drive to school.



Implement purchase process without payment

Integrate payment into the purchase process

Allow users to see their past orders

Define parking pass validation scheme



ELEPHANT CARPACCIO

Vision: Retail calculator – calculate prices for delivery to other countries

Three Inputs:

1. How many items
2. Price per item
3. 2-letter country code

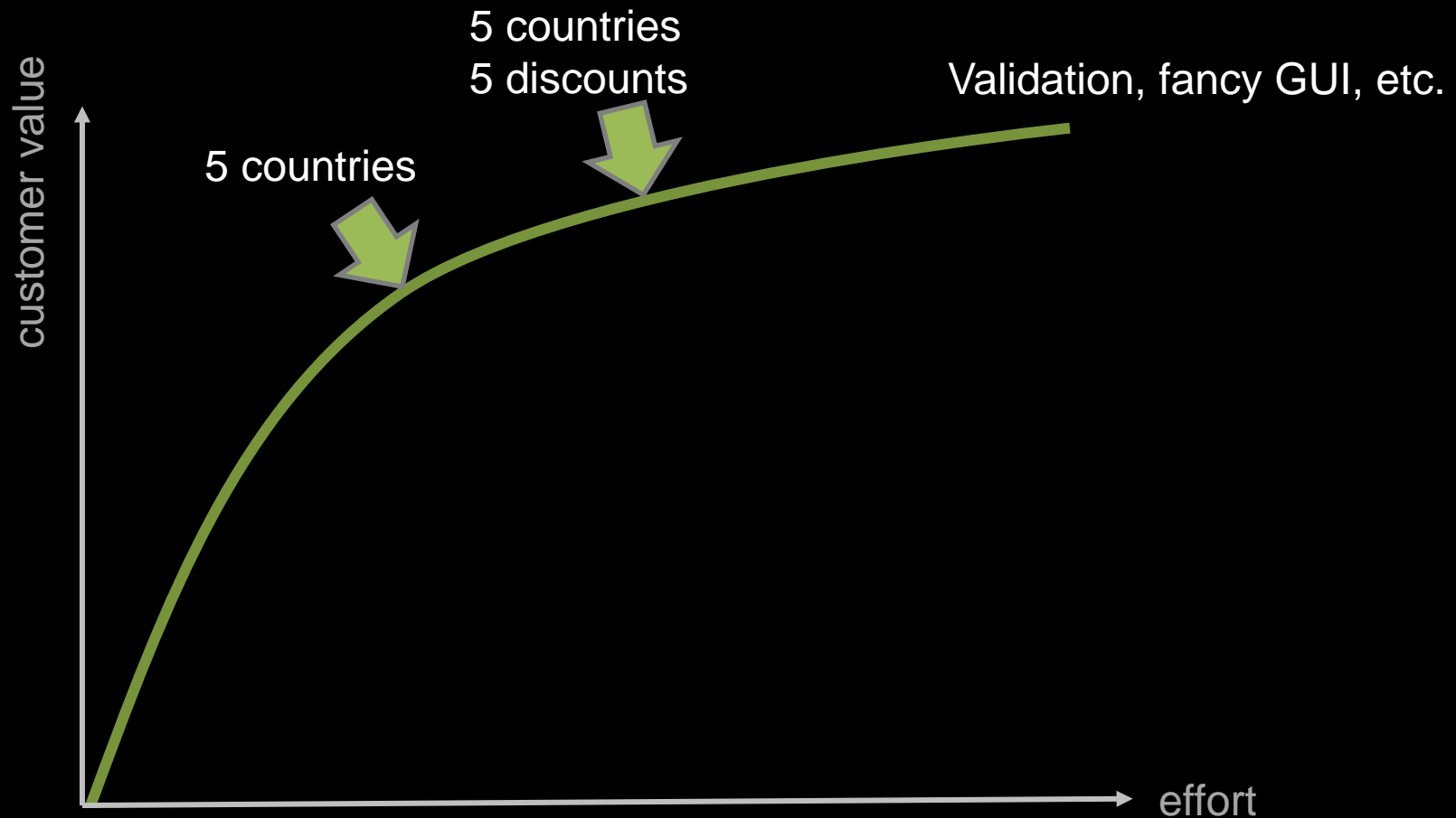
Output: total price of the order.

Algorithm: Give a discount based on total price,
then add state tax based on country code
and discounted price.

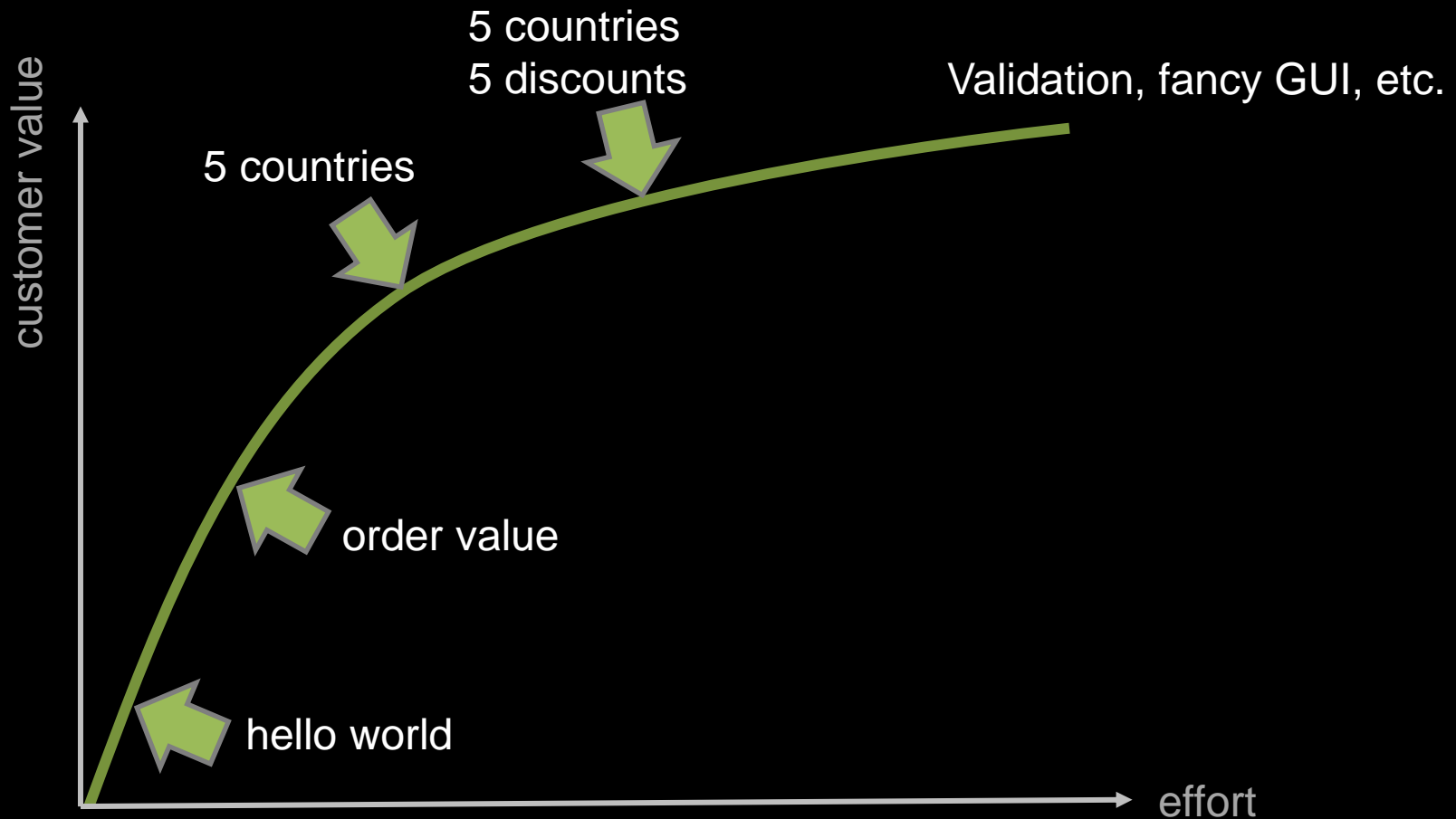
Country	VAT
Belgium (BE)	21%
Germany (DE)	19%
Hungary (HU)	27%
Sweden (SE)	25%
United Kingdom (UK)	20%

Amount	Discount
10.000 SEK	2%
50.000 SEK	3%
100.000 SEK	5%
200.000 SEK	8%
500.000 SEK	10%

Slice user stories as small as possible!



- Split "5 states 5 discounts" into as many slices as possible
- Each slice must have UI, input & output, and be visibly different from last slice



- Split "5 states, 5 discounts" into as many slices as possible
- Each slice must have UI, input & output, and be visibly different from last slice

<http://scrumtrainingseries.com/>

Series of webinars on different Scrum topics (with quiz!)

<https://scrumalliance.org/community>

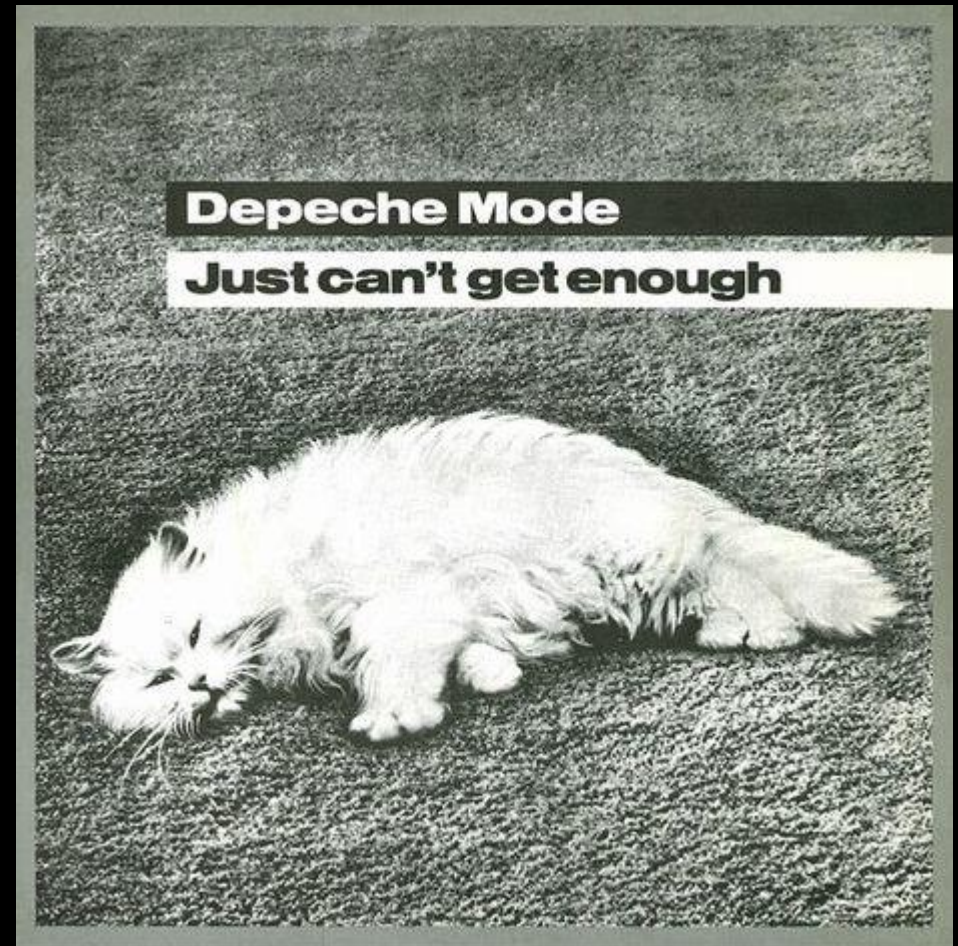
Articles about Scrum in practice

<http://www.solutionsiq.com/what-is-scrumban/>

Discusses combining Scrum and Kanban

<http://scrumandkanban.co.uk/slicing-stories-vertically/>

A chart on splitting user stories



[Cohn, 2005] Mike Cohn. *Agile Estimating and Planning*. Prentice Hall, November 2005

[Buglione & Abran, 2013] Buglione, Luigi, and Alain Abran. *Improving the user story agile technique using the invest criteria*. Eighth International Conference on Software Process and Product Measurement (IWSM-MENSURA), IEEE, 2013.

(User stories) ...

Som ett fartyg behöver jag meddela terminalen om en ankomsttid

Som ett fartyg vill jag veta antalet fartyg i hamnen i realtid

Som ett fartyg behöver jag veta om väderförhållanden för att estimerar ankomsttid

Som ett fartyg vill jag kunna meddela terminalen om min last

Som ett fartyg behöver jag kunna beställa bogsering till hamn

Lägg till ett kort...

I	Independent
N	Negotiable
V	Valuable
E	Estimable
S	Small
T	Testable

Trello exercise stories

1.0 As a tugboat owner i would like to be able to tell a ship owner that i will tug their boat

☒ 0/2

2.0 As a tugboat owner i would like to be able to tell the system when i am on my lunch break

3.0 As a tugboat owner i would like to tell other ships my location

4.0 As a ship owner i would like to request help from a tugboat owner

5.0 As a tugboat owner I would like to get information regarding other ships position/location

Lägg till ett kort...

I	Independent
N	Negotiable
V	Valuable
E	Estimable
S	Small
T	Testable

I	Independent	User stories should not overlap and they should be formulated so they can be implemented in any order.
N	Negotiable	A user story should be an invitation for a conversation. It can be changed, augmented, and redacted; of course, always in dialog with the Product Owner!
V	Valuable	Each user story should deliver value, either to the Product Owner or to Scrum Team.
E	Estimable	It must be possible to assign effort to each user story. A story that can not be estimated is not complete!
S	Small	A user story must be a manageable task. If its completion takes longer than 3 or 4 days, it must be broken down!
T	Testable	There must be clear, testable criteria to define when the story is done in the eyes of the Product Owner and the Scrum Team.

[Buglione & Abran, 2013]

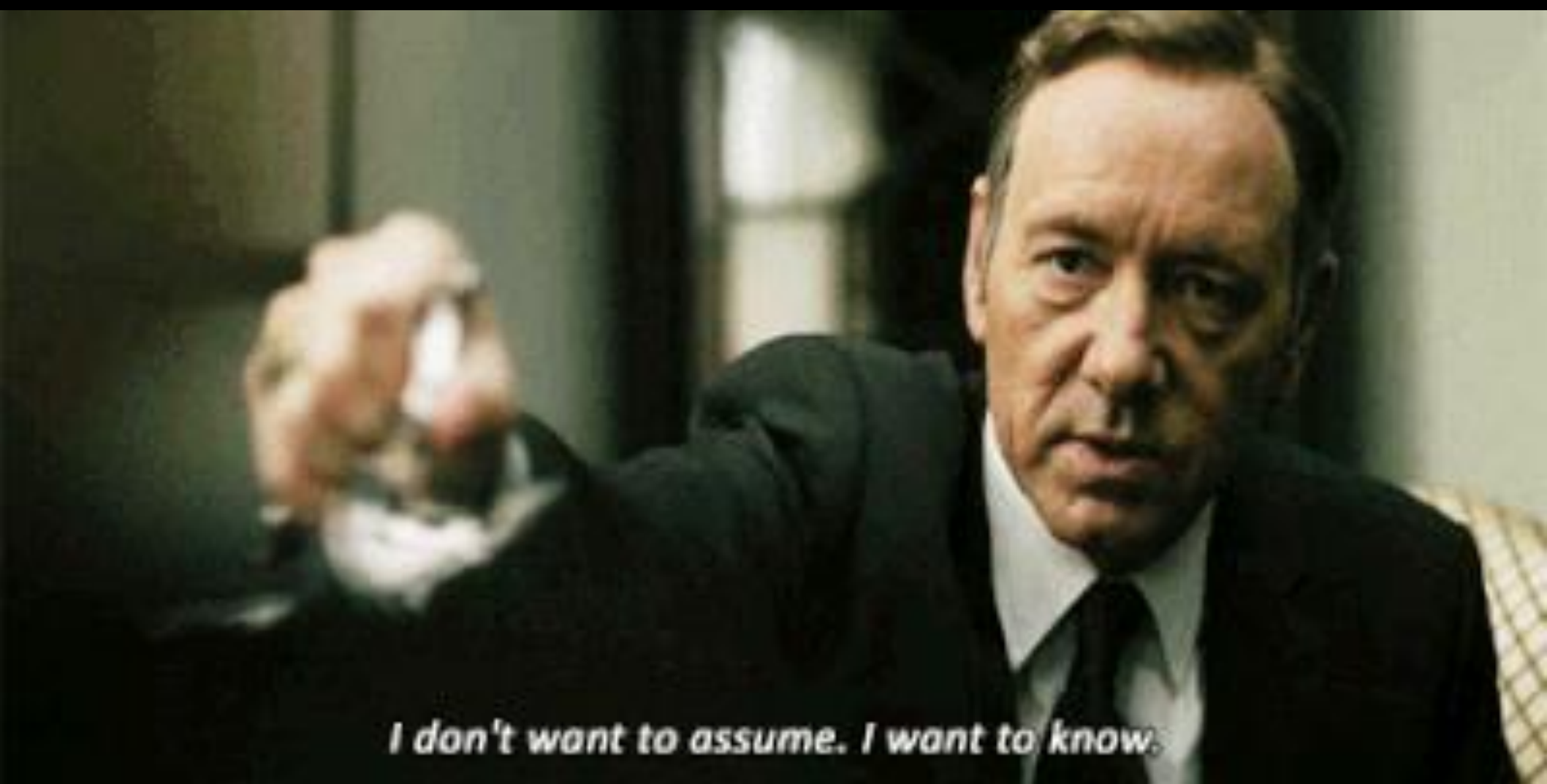
Vertical slices!

INVEST criteria!

Priorisation!

Definition of Done!

Difference between
Product and Sprint Backlog!



I don't want to assume. I want to know.

REALITY CHECK

What was the purpose of the lecture?

Which learning objectives were covered? How?

What was the relationship to the course assessment?

QA

'Questions don't have to make sense, Vincent', said Miss Susan.

'But answers do'

Terry Pratchett
Thief of Time, 2001