

Backlogs and Task Breakdown

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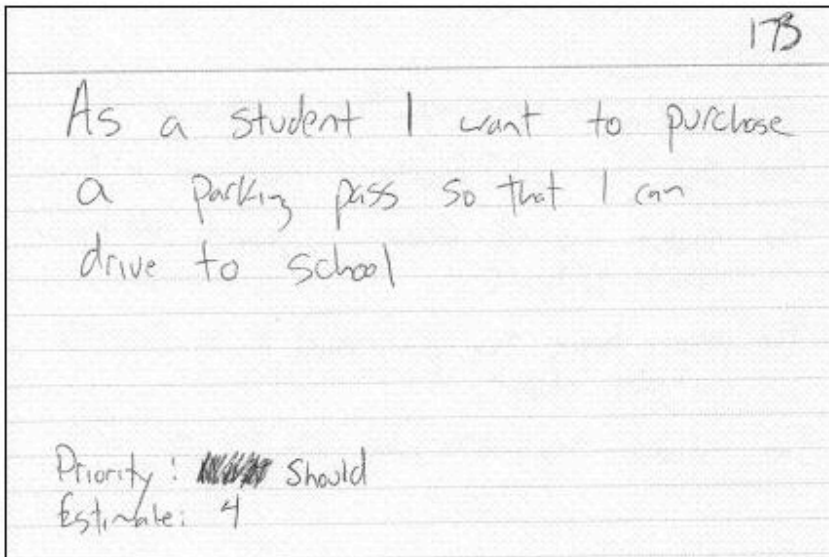
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User Story Cards

- Describes the requirements and the acceptance criteria
- Can also hold information about the estimate (from Scrum Team) and the priority (from Product Owner)
- Should describe the value of the story
- Can be updated continuously

Front of Card



Handwritten text on the front of a User Story Card:

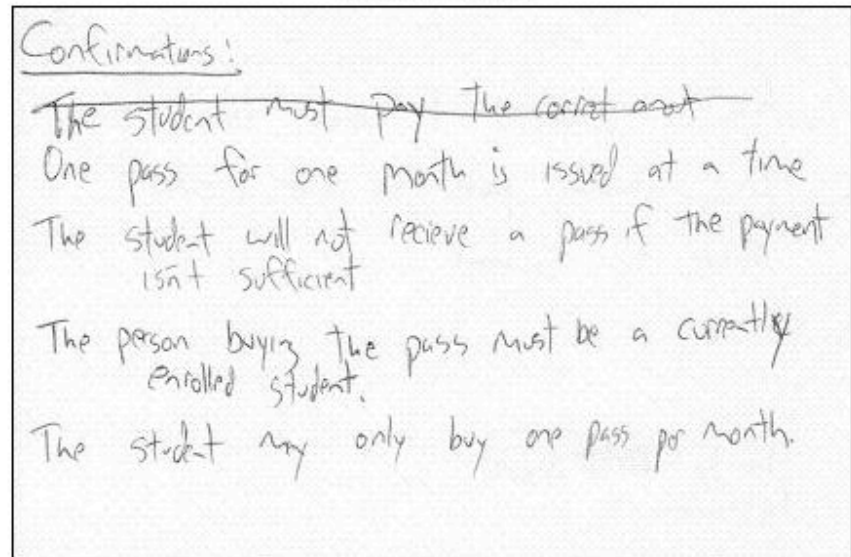
173

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

Priority: ~~High~~ Should

Estimate: 4

Back of Card



Handwritten text on the back of a User Story Card:

Confirmations:

~~The student must pay the correct amount~~

One pass for one month is issued at a time

The student will not receive a pass if the payment isn't sufficient

The person buying the pass must be a currently enrolled student.

The student may only buy one pass per month.

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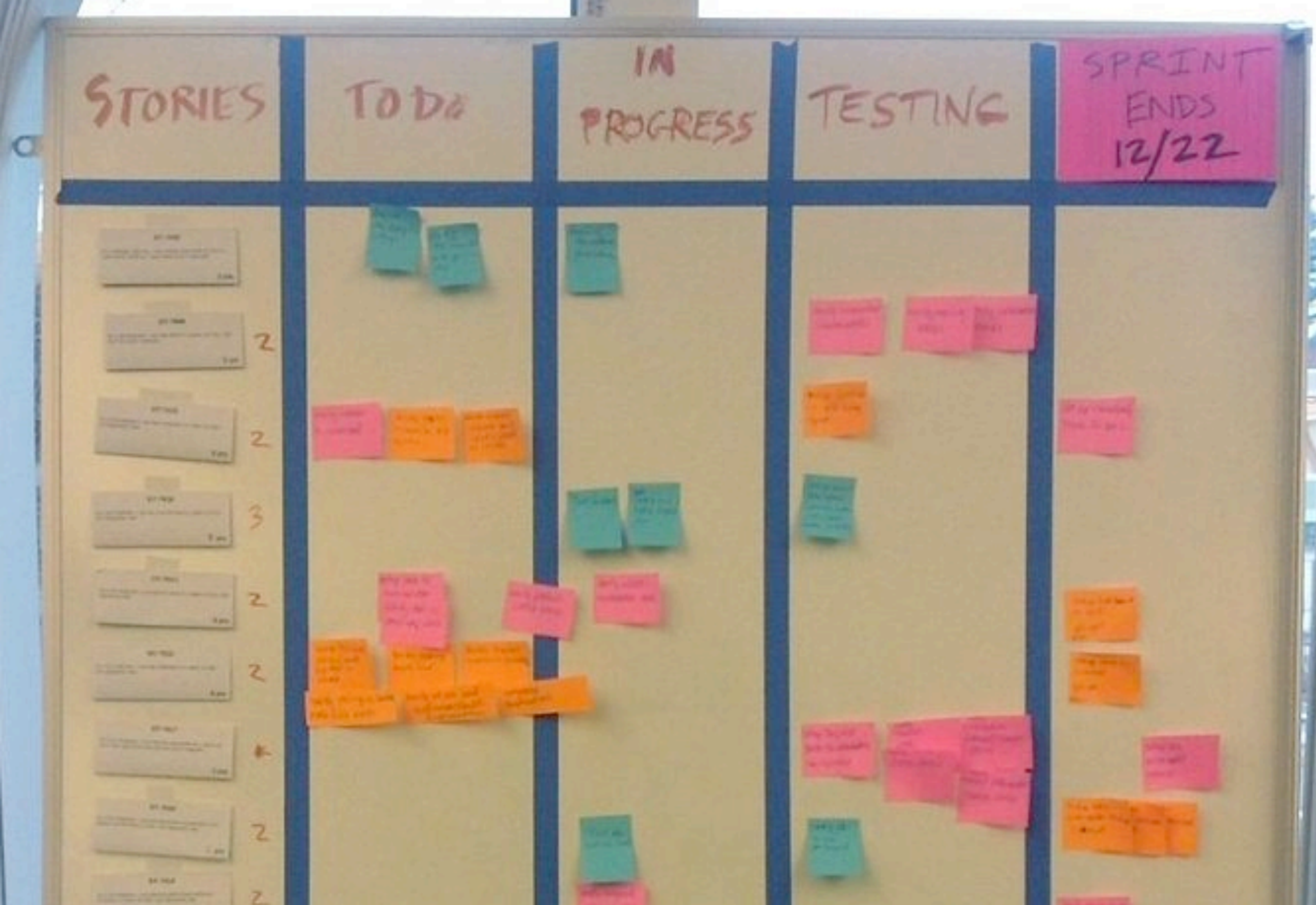
INVEST Criteria

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]

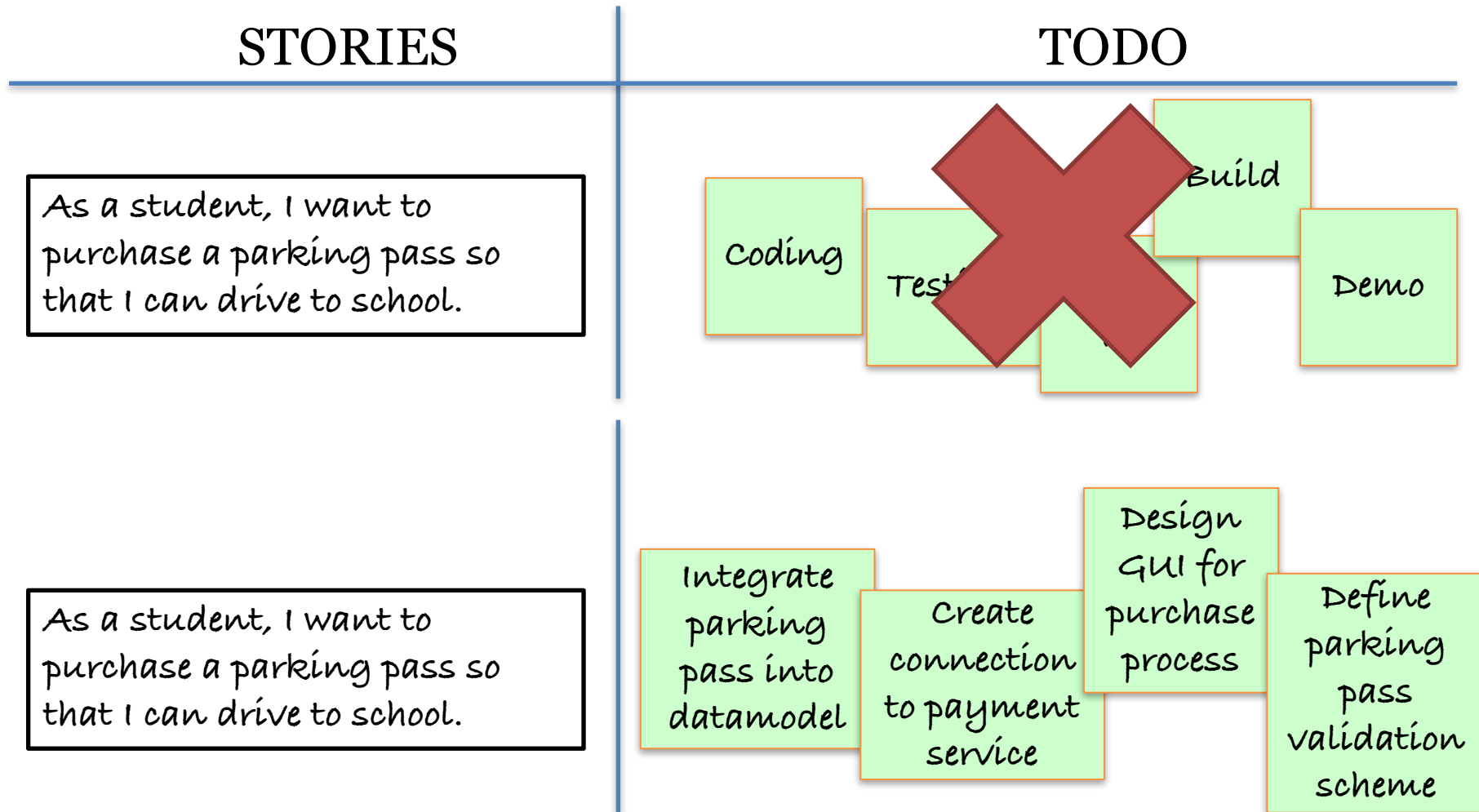
Working with the backlog

- Differentiation product backlog/sprint backlog
 - Product backlog: Prioritised list of **all** product requirements
 - Sprint backlog: List of requirements selected **for the current sprint**
- Product backlog can be continuously updated by the Product Owner
- Sprint backlog contains more detailed information: tasks
- Sprint backlog is only updated by Scrum Team



Tasks

- User stories are usually “too big” to tackle as one



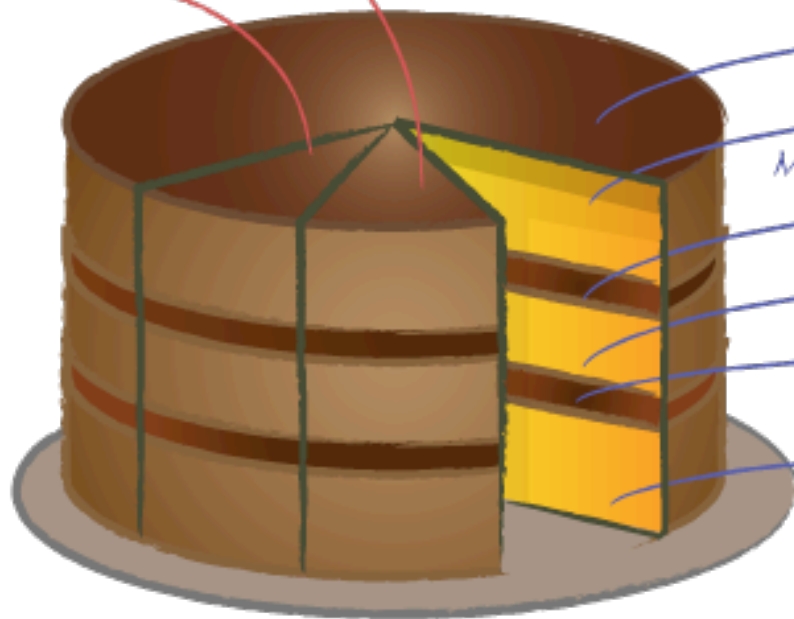
Vertical slices

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

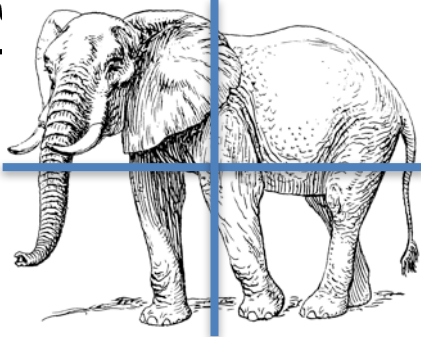
Tuxedo DB Interface

Transport Protocol

Bank Mainframe Database

Elephant Carpaccio/Laminating

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



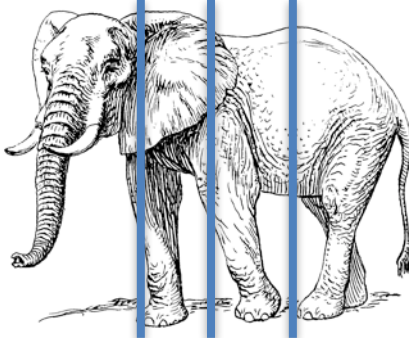
Integrate parking pass into datamodel

connect to service

Design UI for purchase process

Define parking pass validation scheme

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



Implement purchase process without payment

Integrate payment into the purchase process

Allow users to see their past orders

Define parking pass validation scheme

Exercise: Create a backlog

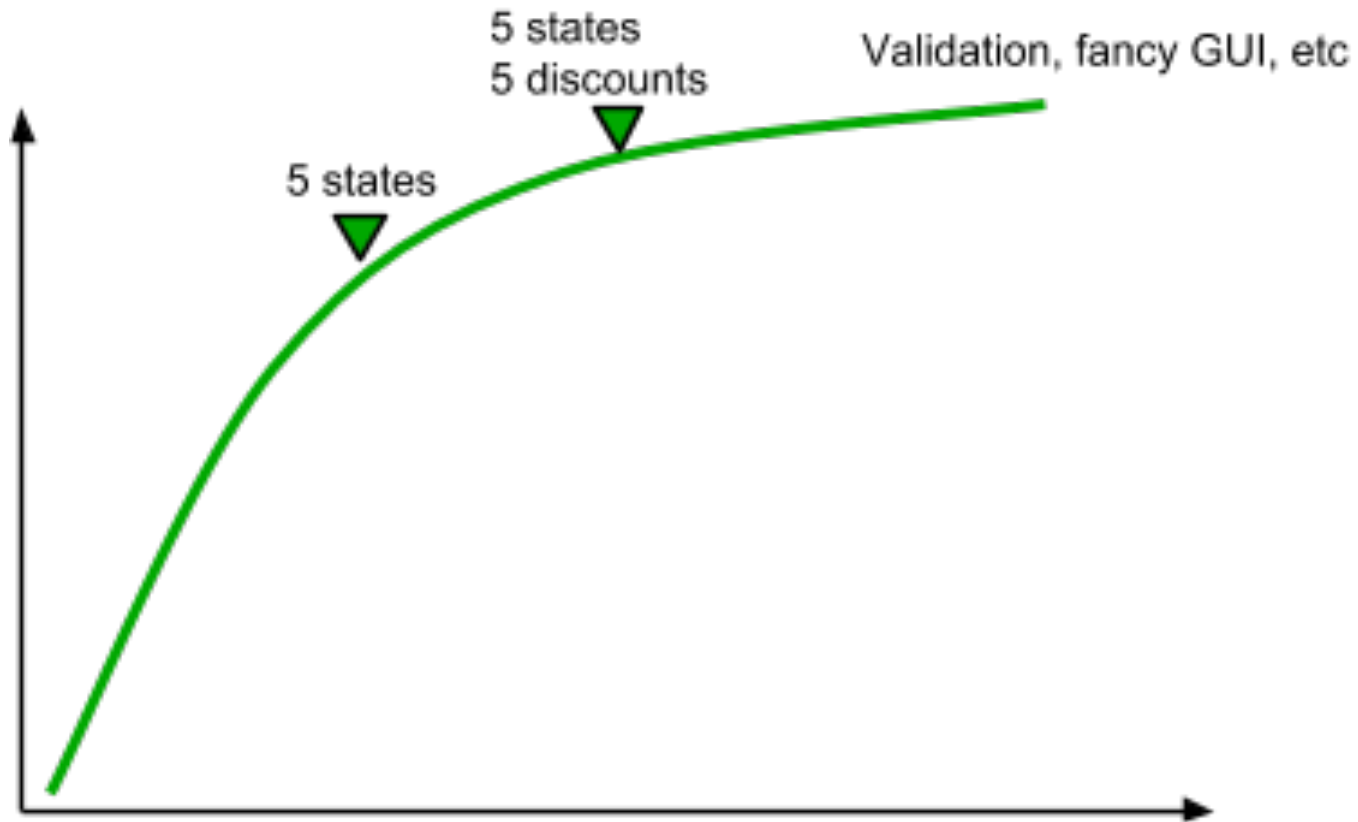
- Vision: Retail calculator – calculate prices for deliveries in other countries
- Three Inputs:
 - How many items
 - Price per item
 - 2-letter country code
- Output: total price of the order.
- Algorithm: Give a discount based on total price, then add state tax based on country code and discounted price.



Slice user stories as small as possible!

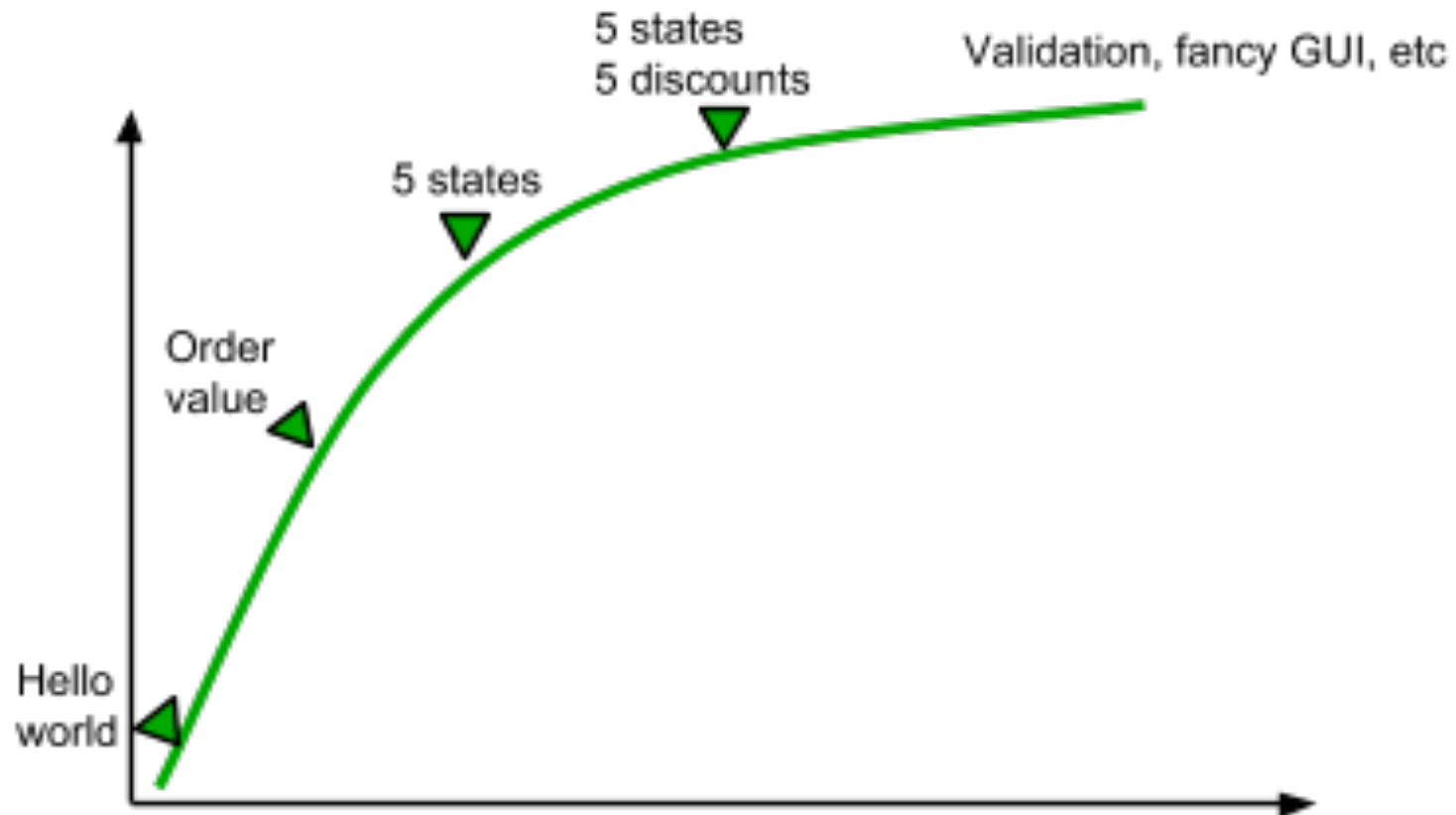
Country	VAT	Amount	Discount
Belgium (BE)	21%	10.000 SEK	2%
Germany (DE)	19%	50.000 SEK	3%
Hungary (HU)	27%	100.000 SEK	5%
Sweden (SE)	25%	200.000 SEK	8%
United Kingdom (UK)	20%	500.000 SEK	10%

Exercise: Customer Value



- 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

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More resources

- <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.

