CLEMSON UNIVERSITY

CPSC 3720
Lesson 11

Estimating and Planning Part 2

Sprint 0 Part 2 Kickoff

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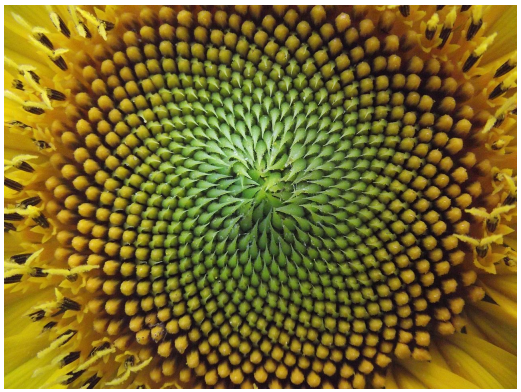
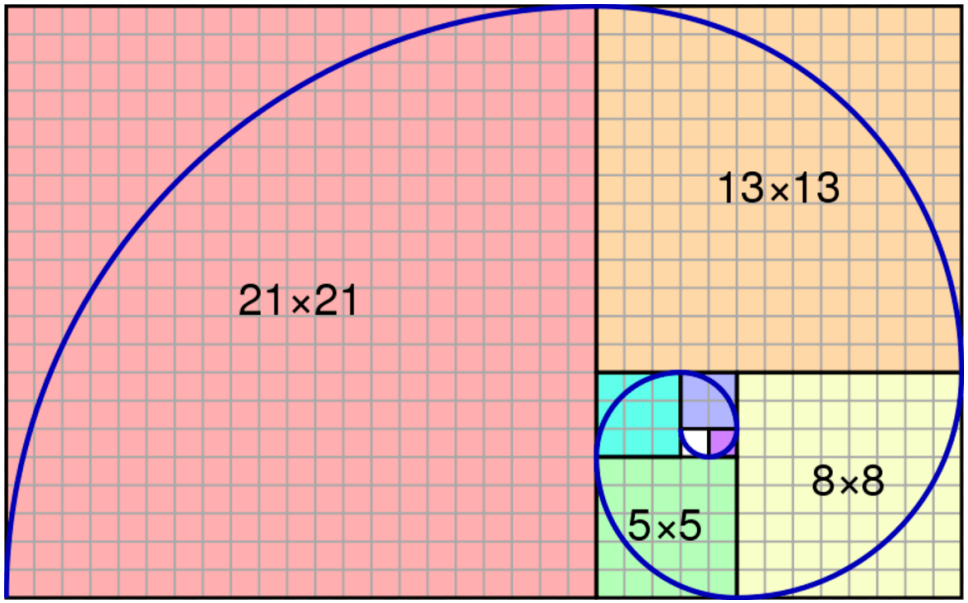
School of COMPUTING

Estimating Using Fibonacci Numbers

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987, 1597, 2584, 4181, 6765, 10946, 17711, 28657, 46368, 75025, 121393, 196418, 317811, ...





1. **It's Composed Of Integers**
2. **It's Non-linear**
3. **It Forces You To Choose "More Or Less"**
4. **It Sounds Cool And Adds An Air Of Legitimacy**

Let's Practice!

Estimation using Fibonacci Numbers – make a copy of below xls file

Rapid Estimation Game

Important Lesson in Software Projects

- Jim McCarthy – Visual C++ director at Microsoft in 90's-2000s; considered one of the greatest teams ever at Microsoft
  - https://mccarthyshow.com/about/

- From his book Dynamics of Software Development
  - Don't Go Dark
  - Beware of the Guy in the Room

Don’t Go Dark

https://www.youtube.com/watch?v=9OJ9hplU8XA&list=PL9B1543FBFFB18EDD&index=4

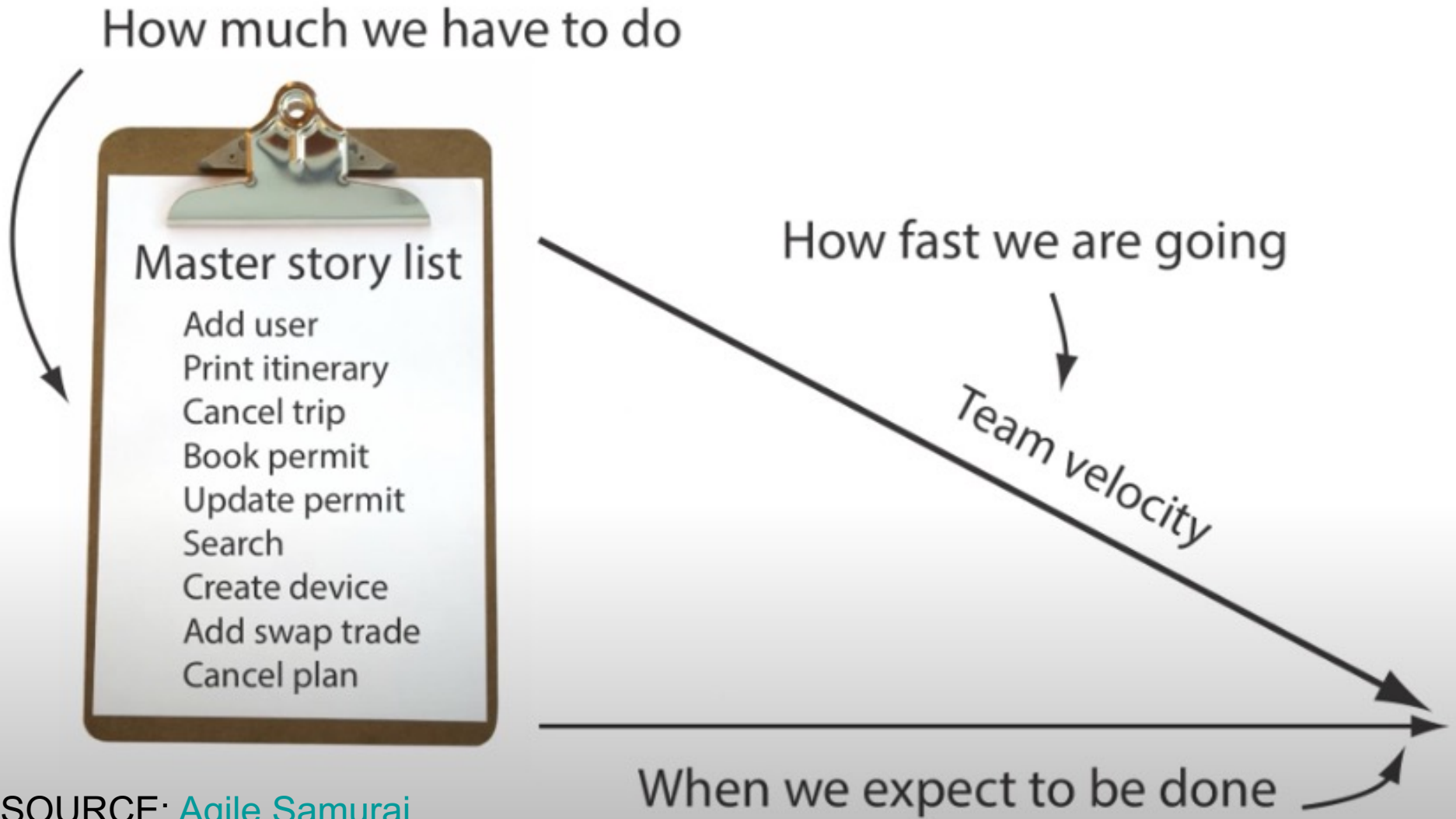
Beware of the Guy in a Room

https://www.youtube.com/watch?v=oY6BCHqEbyc

Plans need Estimates

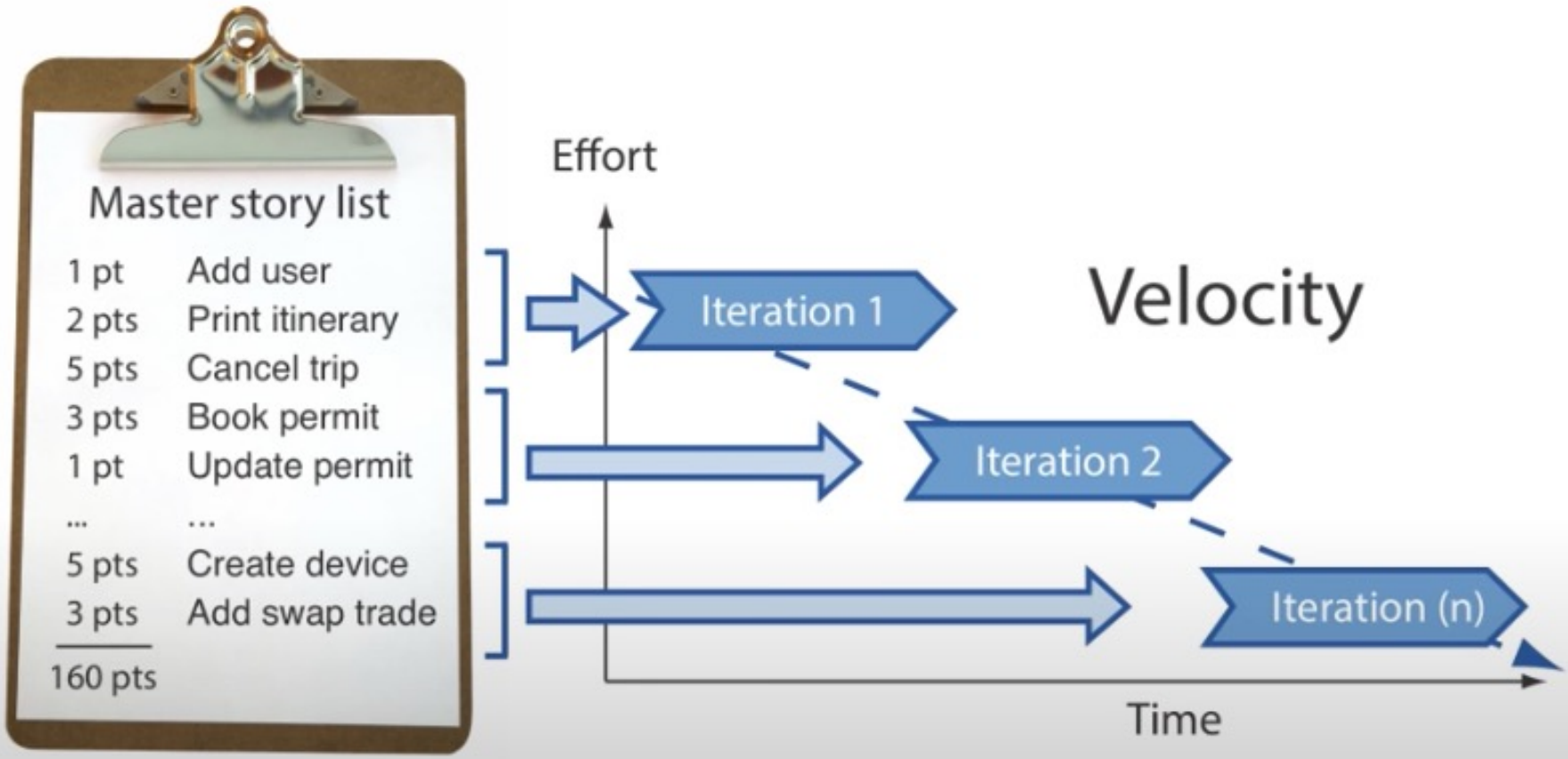
- How?
  - Keep it Simple
  - Use Relative Sizing
- Once you have estimates:
  - Create a high-level plan and budget
  - Ongoing refinement (reminds us we were guessing)

The Agile Plan



SOURCE: Agile Samurai

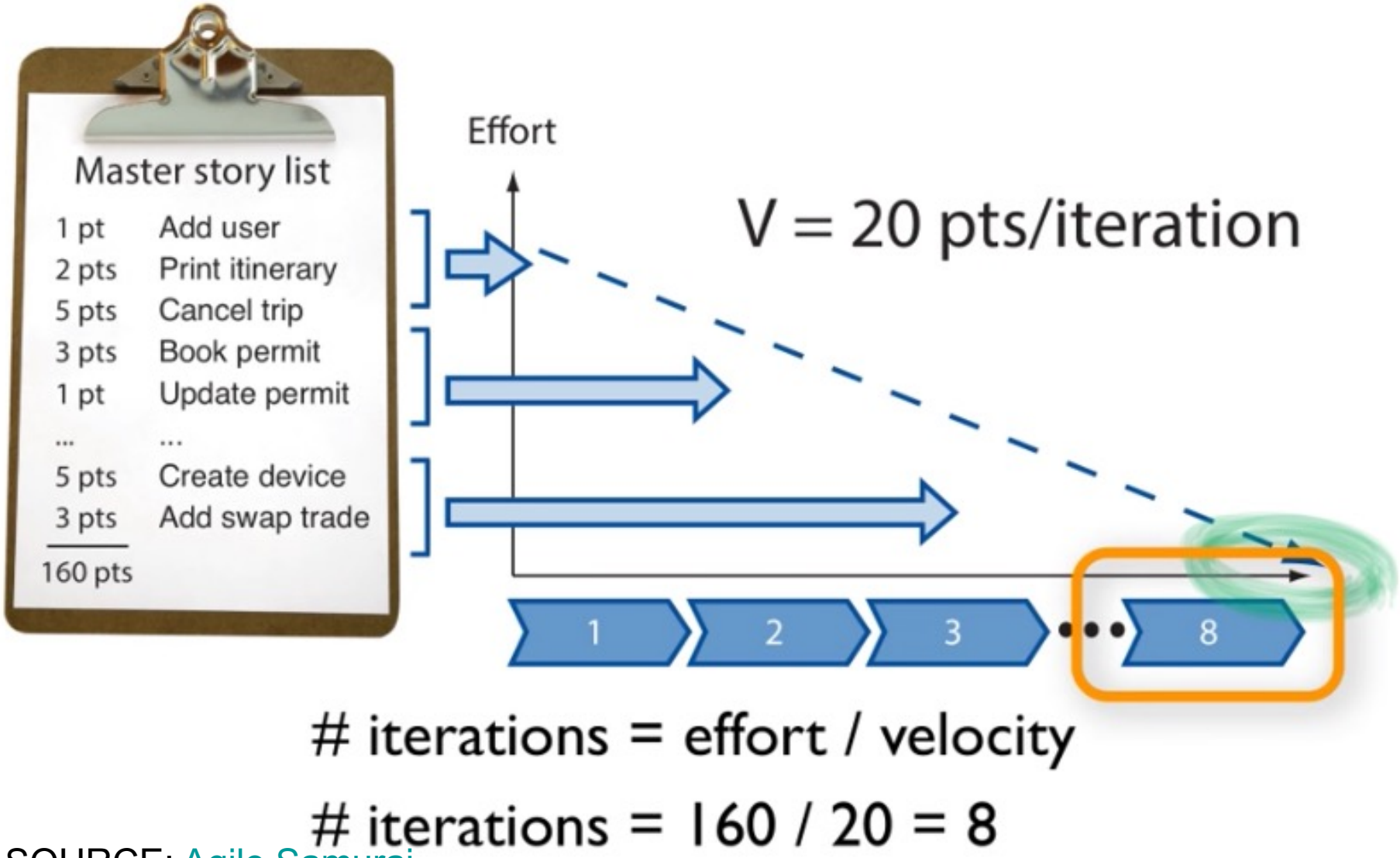
The Agile Plan



SOURCE: Agile Samurai

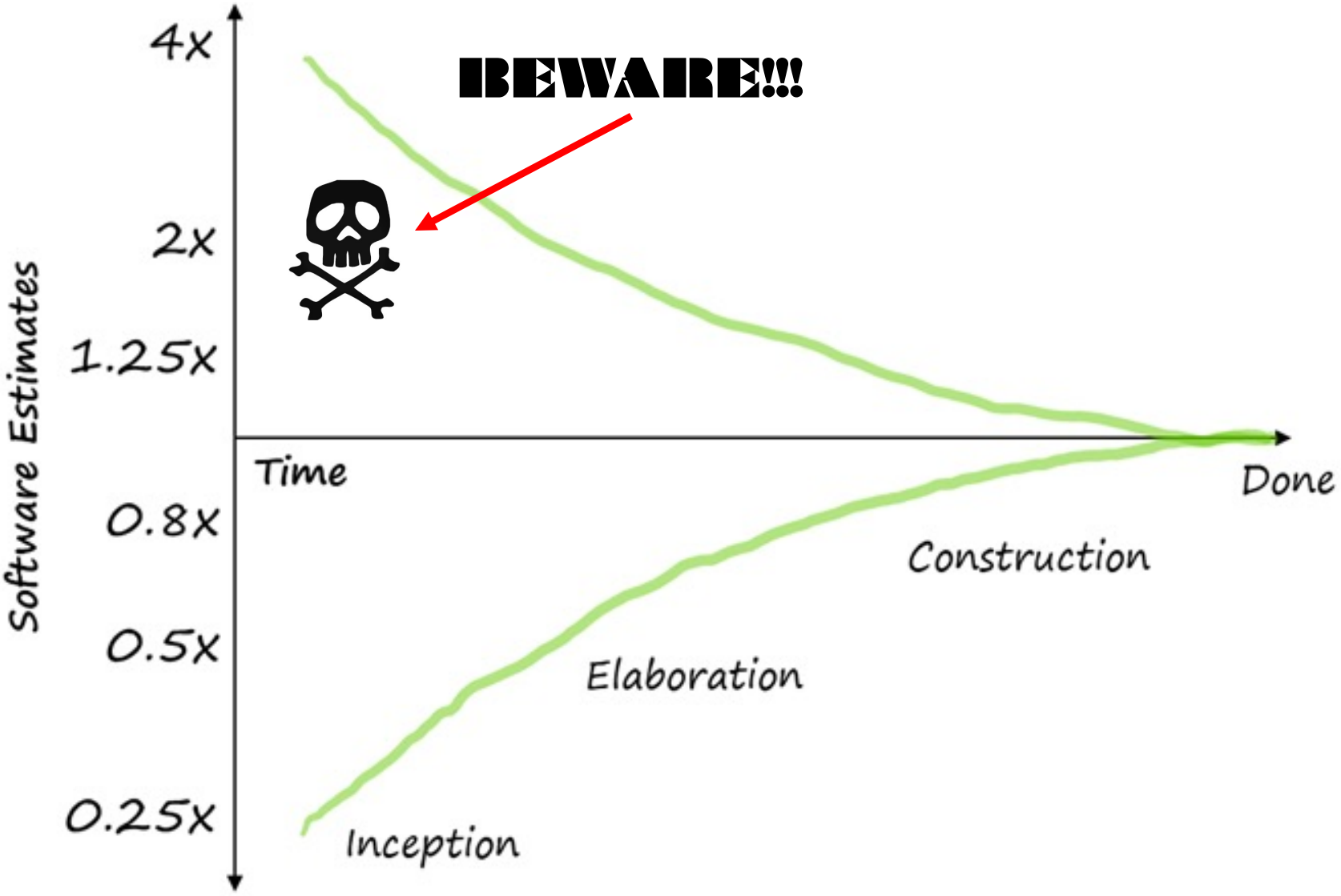
NOTE: Iteration = Sprint

The Agile Plan – First "Guess"



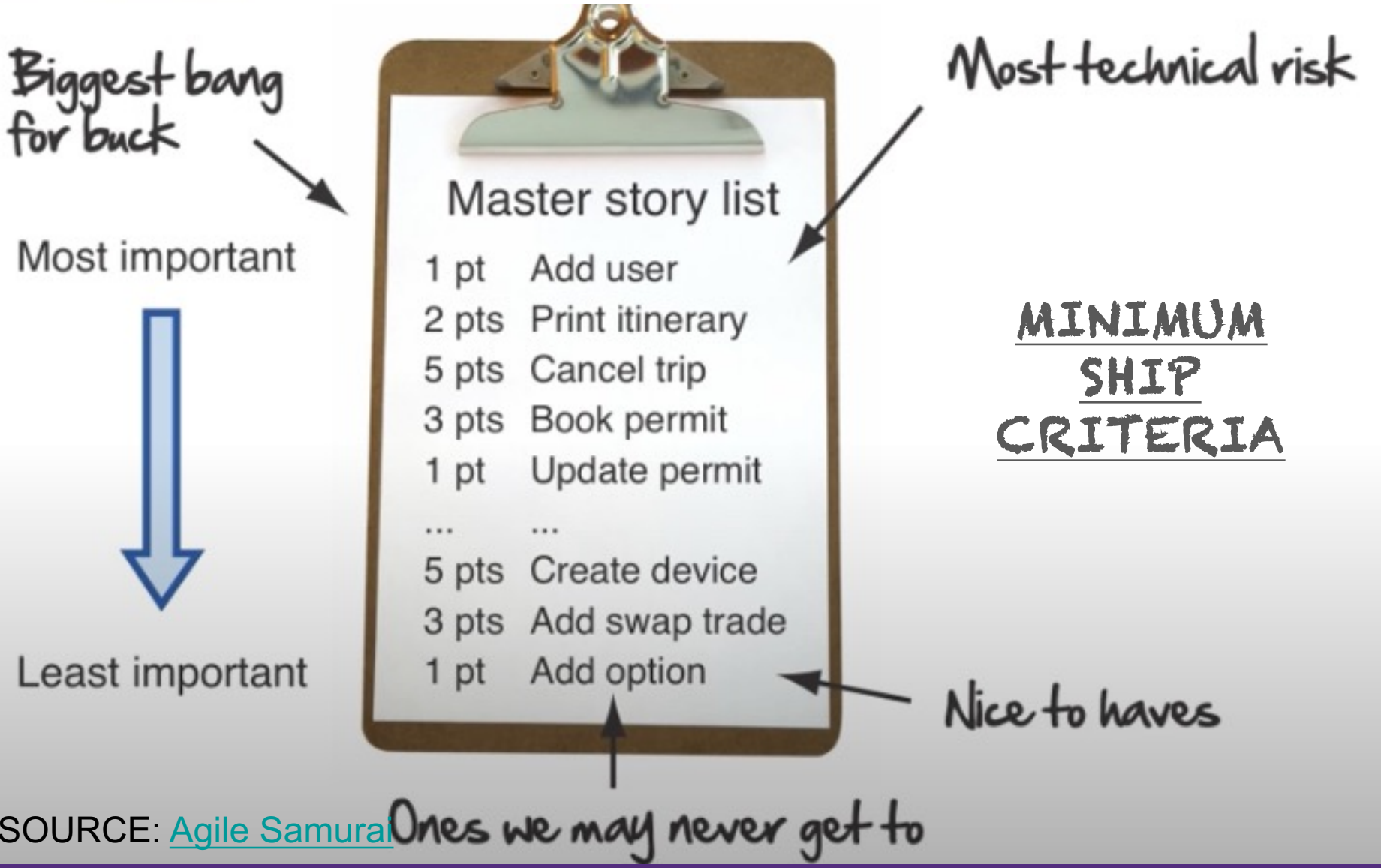
SOURCE: Agile Samurai

The Cone of Uncertainty



Committing to the Initial Plan= The Death March

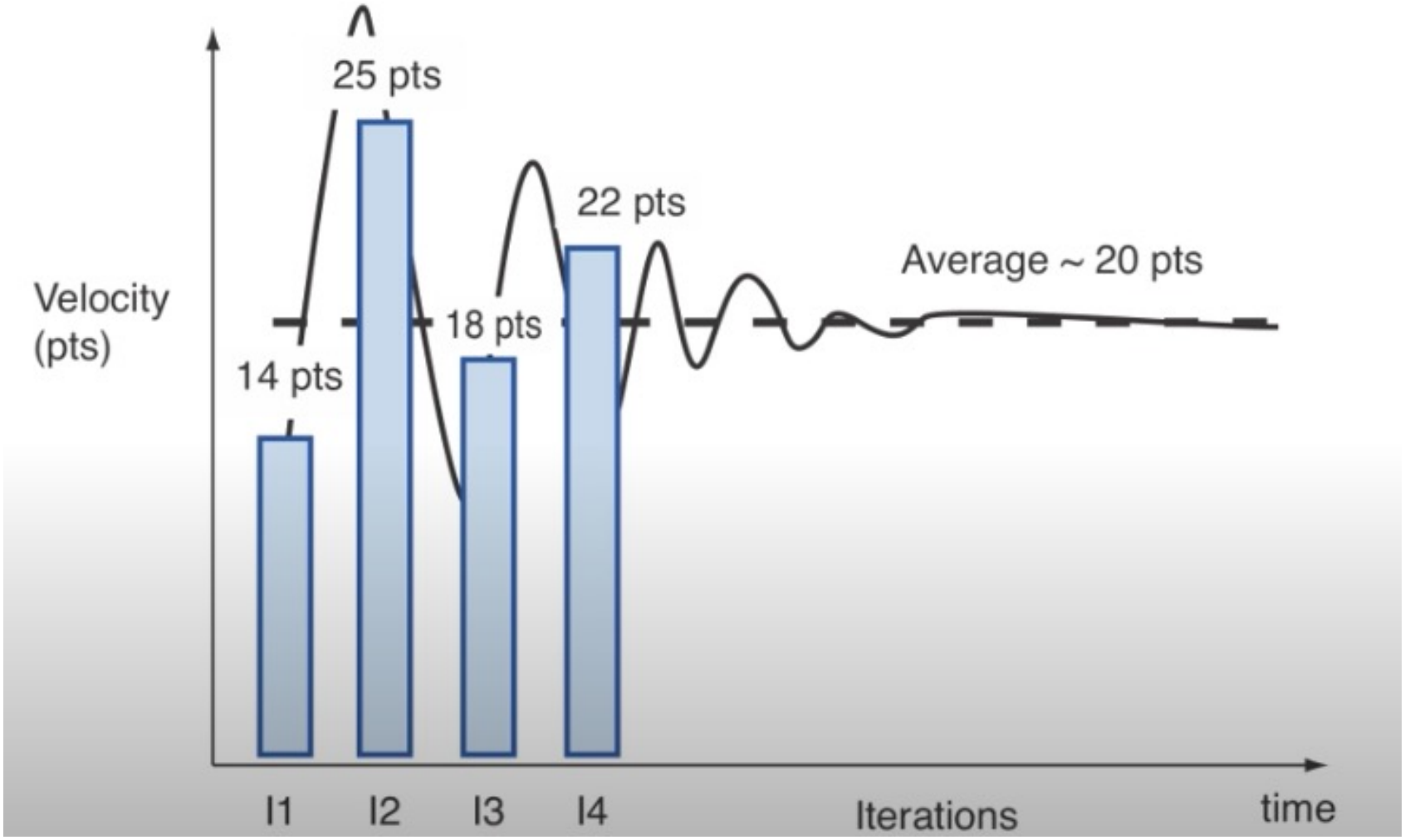
Prioritize!!! And this may Change!



SOURCE: Agile Samurai

Velocity fluctuates too!

What impacts velocity?



SOURCE: Agile Samurai

After Every Sprint

- Review Velocity and adjust
- Review Release Burndown and adjust

  (**NOTE**: Release burndown is a graph showing we have completed stories as expected in the plan)
- Revisit backlog estimates and adjust
- Review Backlogs and adjust

What do we do if any of these change from our original plan?

Ways to Adjust

- Move the date
- Adjust features
- Add people

Which is best?

Ways to Adjust

- Move the date


Adjust features

- Add people

Nothing gets software done like a date!

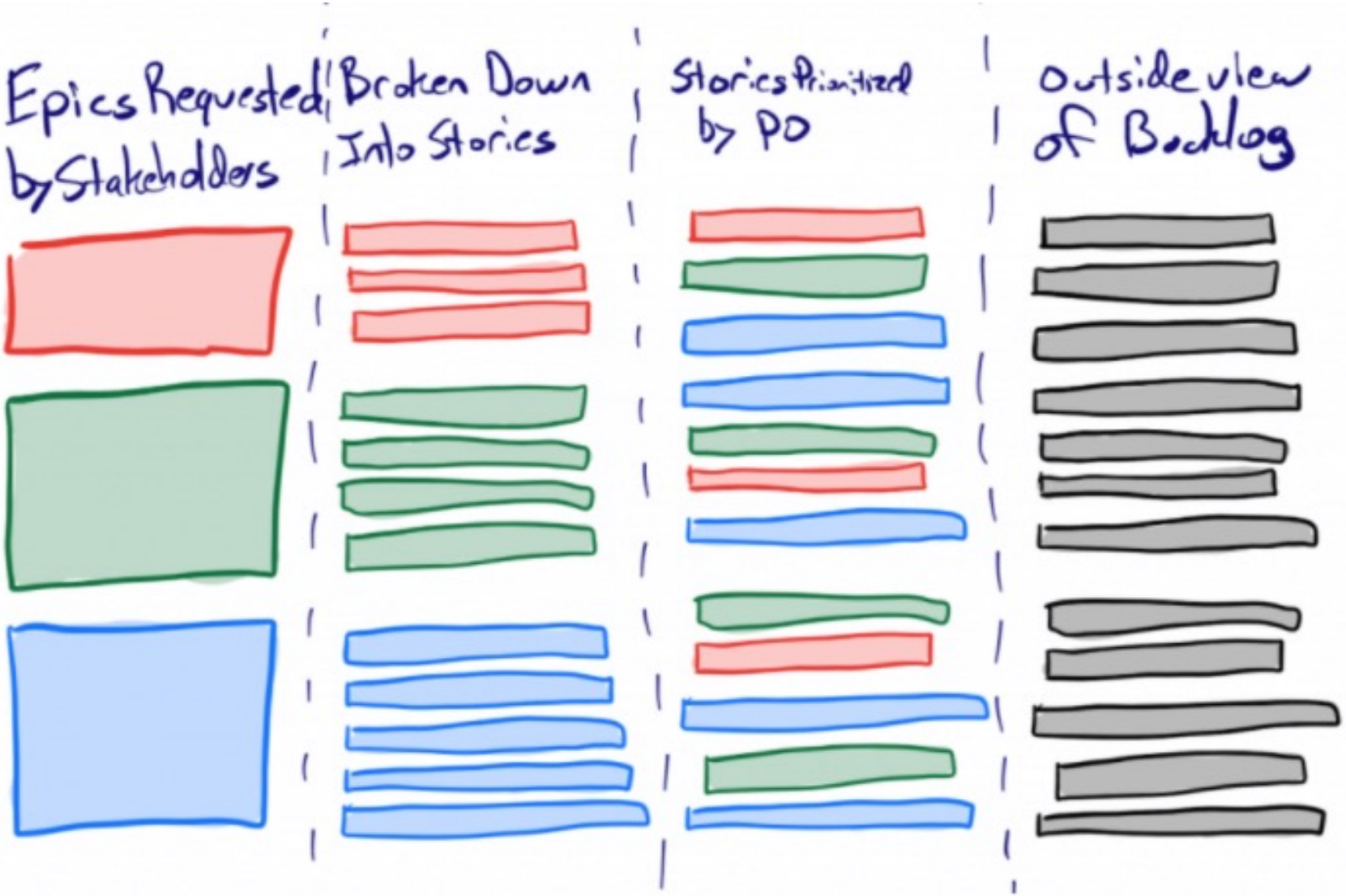
Planning Poker Demo

https://planningpokeronline.com/

Planning Poker for your Epics

- Assign someone in your team to set up the Planning Poker game; use the Fibonacci estimate method
- Invite members of your team with link
- Go to your team's ***TigerChow Epics and Services*** Board in Trello and pick 3 Epics from the board (across different user roles) that apply to your team's service
- Add the 3 Epics (FYI - 5 is the free limit) to the Issues in Planning Poker
- Play!

The Product Backlog



TigerChow Project – Sprint 0 Part 2

Sprint 0 Part 2 (total of 25 points):

- **Create a Release Plan** using the instructions in Canvas!
- 3-4 minute review per team Thursday 2/22 to present your overall TigerChow release plan. You will create an Excel plan (similar to the exercise today) and a PowerPoint.
- 10 points for plan presentation
- 10 points for well structured plan
- 5 points for the Sprint Review (if you are not present you lose the points)
- Team Survey due at end of day Friday 2/23 (if you don't do the survey, it will impact your grade!)