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SS ZG622:

Software Project Management

Contact Session # 3

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Outline



- Agile process - Scrum sprint planning
 - Product backlog (evolving system scope)
 - **Prioritizing and sprint backlog**
 - **Estimating story points**
 - Burndown charts for project management
 - Decomposition of complex user stories

Mux-Core Sales – Expected functionality



As a/an	I want to	So that
Supervisor	view daily sales performance of movies on dashboard	I can provide my feedback to my manager
Manager	view sales performance of various movies and screens	I can analyze sales performance
Manager	compare sales of movies with those at other multiplexes	I can analyze differences and take necessary actions
Manager	set discounts on specific shows	the multiplex can attract more customers
Manager	receive notifications about sales deviations	I can review the sales pattern and take necessary actions
Counter Staff	sign in for a sales duty session	I can sell tickets to customers
Counter Staff	sell movie tickets to customers	they can be admitted to watch movies
Counter Staff	sign out of sales duty session	my session details can be recorded and closed
Customer	search for movies and shows	I can select a movie show I am interested in
Customer	register for a loyalty card	I can buy tickets online and rate movies
Customer	buy tickets for a selected movie show	I/we can be admitted to watch that movie show
Customer	rate and review movies I have seen	other customers can read from my rating/review
Customer	view my loyalty card points balance	I can purchase tickets with those points

Product backlog prioritization by “value”



As a/an	I want to
Manager	view sales performance of various movies and screens
Manager	compare sales of movies with those at other multiplexes
Manager	set discounts on specific shows
Manager	receive notifications about sales deviations from targets
Counter Staff	sign in for a sales duty session
Counter Staff	sell movie tickets to customers
Counter Staff	sign out of sales duty session
Customer	search for movies and shows
Customer	register for a loyalty card
Customer	buy tickets for a selected movie show
Customer	rate and review movies I have seen
Customer	view my loyalty card points balance

Activity CS3#1



Prioritize the given user stories by
changing the order of the stories
(high value ones at the top)

<https://pollev.com/narsibolloju019>

Scrum - estimation



- Traditional software teams give estimates in a time format: days, weeks, months.
- Many agile teams, however, have transitioned to story points. Story points rate the relative effort of work using
 - Fibonacci-like format: 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, ...
 - Powers of 2: 1, 2, 4, 8, 16, 32, 64, ...
 - T-shirt sizes: XXS, XS, S, M, L, XL, XXL
 - ...



Planning Poker – estimation technique



- All participants use numbered playing cards and estimate the items
- Individual estimates are done and discussion is raised when there are large differences
- This process is repeated till the whole team reached consensus about the agreed estimation (which is not an average of estimates!)

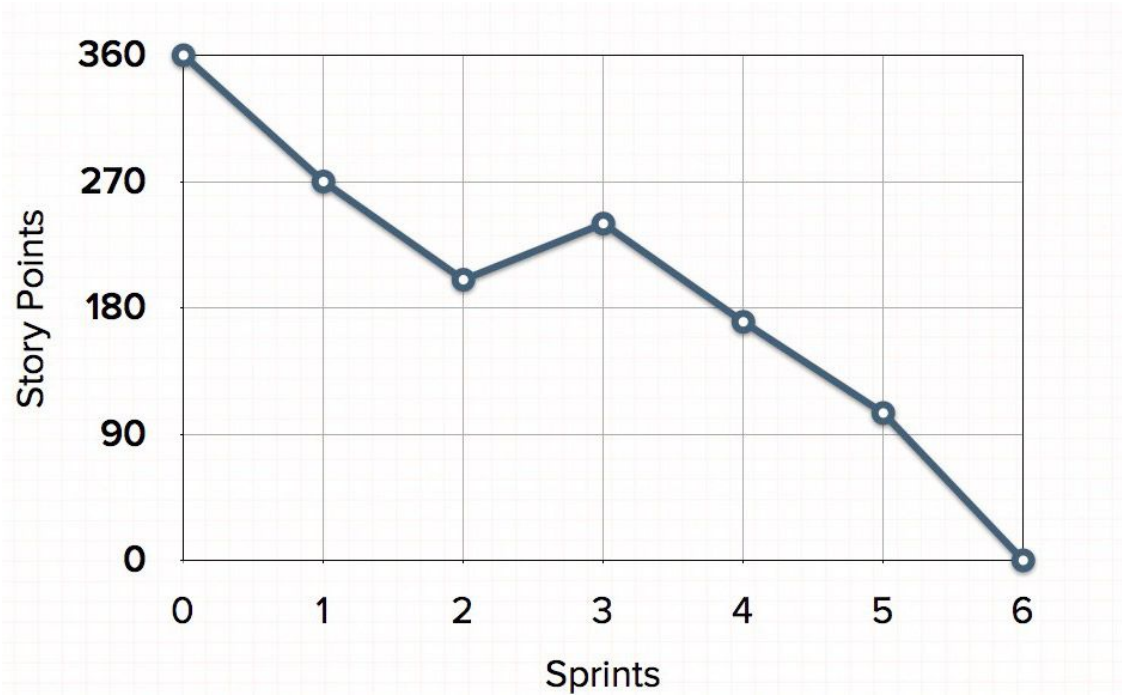
<https://technology.amis.nl/2016/03/23/8-agile-estimation-techniques-beyond-planning-poker/>

Activity CS3#2



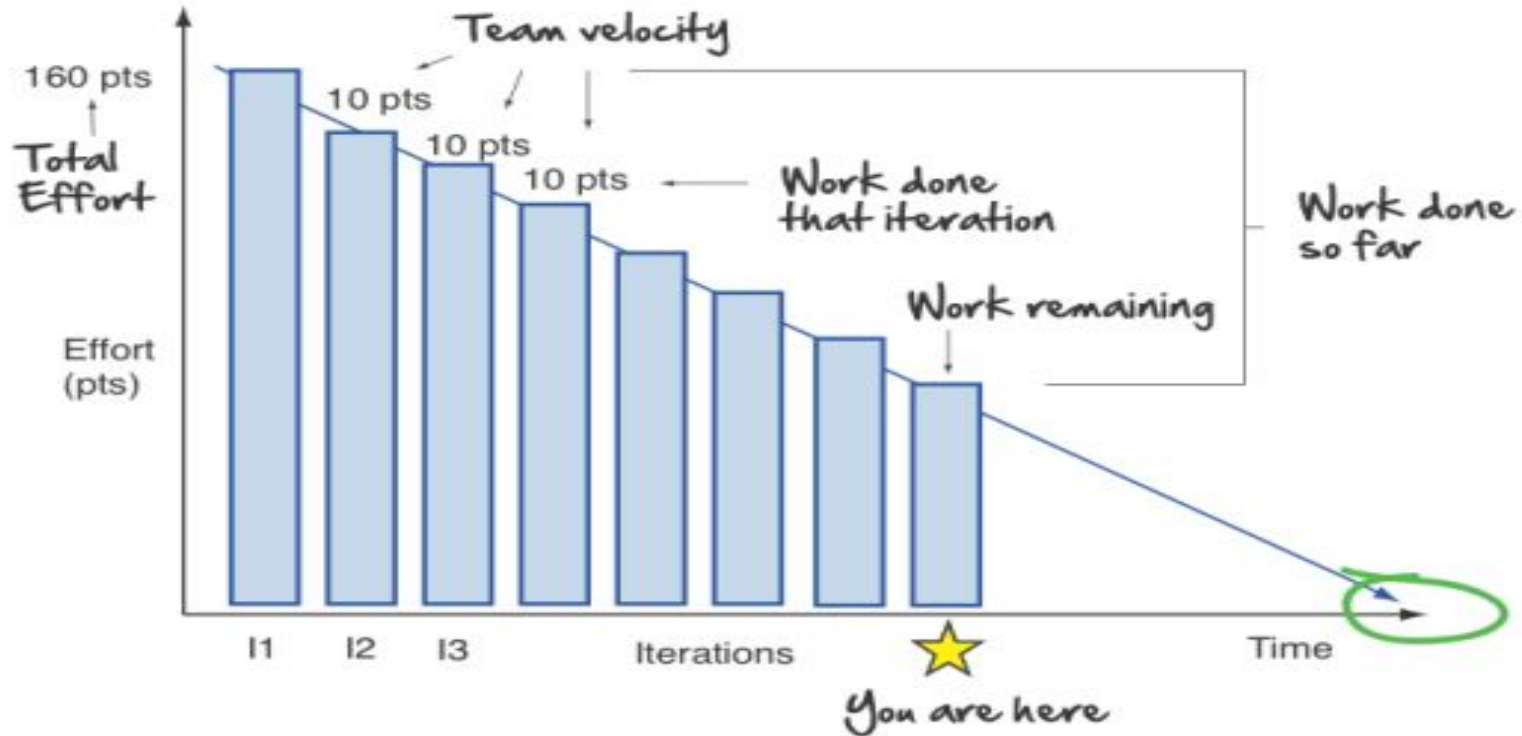
Estimation of “story points” for
“set discounts on specific shows”
using powers of 2: 1, 2, 4, 8, 16, 32, ...

Burndown Chart - example



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Burndown Charts



Activity CS3#3



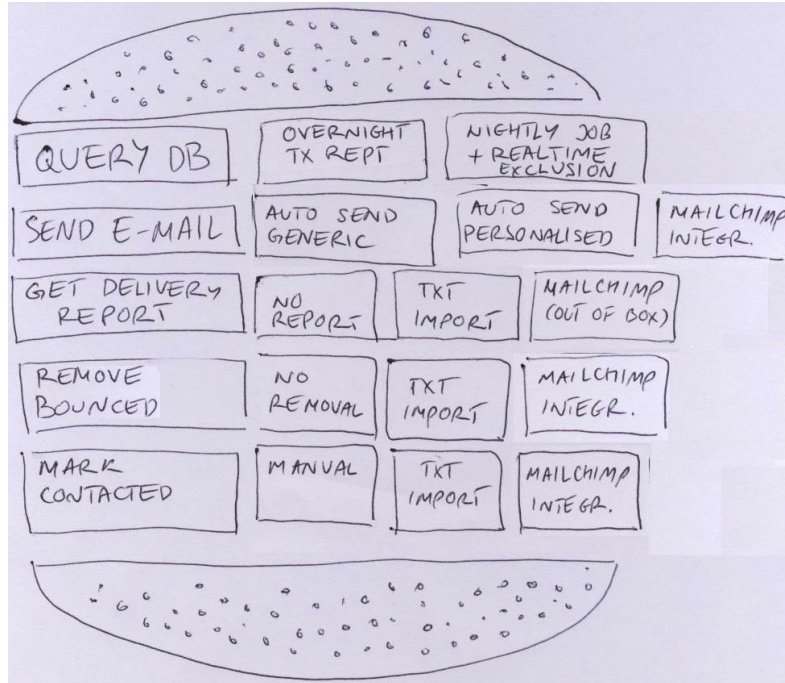
Decompose the user story
“sell movie tickets to customers”
into several simpler user stories

User story decomposition - vertical slicing



<https://gojko.net/2012/01/23/splitting-user-stories-the-hamburger-method/>

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