**Practice Exercise: Calculating Sprint Velocity**

SPRINT 1

* Assuming that in Sprint 1, team committed to total of 5 user stories
* Story point of each of the user story = 8 story points
* Total story points committed by team in sprint 1 = 40 story points
* By end of sprint 01 team completed 3 out of 5 user stories

SPRINT 2

* Assuming that in sprint 02, team committed to total of 7 user stories
* Story point of each of the user story = 8 story points
* Total story points committed by team in sprint 01 = 56 story points
* **By end sprint team completed 4 out of 7 user stories**

SPRINT 3

* Assuming that in sprint 03, team committed to total of 9 user stories
* Story point of each of the user story = 8 story points
* Total story points committed by team in sprint 03 = 72 story points
* By end sprint 03, team completed 5 out of 9 user stories

**Q1. Calculate Velocity for each of the Sprint 1,2 and 3.**

**Q2. Calculate Average Velocity of Sprint 1,2 and 3.**

**Q3. Suppose the user stories remaining represent a total of 160 story points, in how many sprints the project will get completed?**

**Solution**

**Solution for Q1.**

Velocity of SPRINT 1: 24 Story points

* Total user stories completed in sprint 01 = 3 user stories
* Total story points completed in sprint 01 = 3 x 8 story points -> 24 story points

Velocity of SPRINT 2: 32 Story points

* Total user story completed in sprint 02 = 4 user stories
* Total story points completed in sprint 02 = 4×8 story points->32 story points

Velocity of SPRINT 3: 40 Story Points

* Total user story completed in sprint 03 = 5 user stories
* Total story points completed in sprint 03 = 5×8 story points->40 story points

**Solution for Q2.**

Once you know the velocity of sprint 1, 2 and 3, calculate the average of them.

* Sprint 01: 24
* Sprint 02: 32
* Sprint 03: 40

So, your average velocity of sprint is: 24+32+40/3 = 32 Story Points/Sprint

**Solution for Q3.**

Total Story points against remaining User Stories (A): 160

Average Velocity (B): 32 Story Points/ Sprint

Forecast for the remaining effort for the Project: A/B = 160/32

= 5 Sprints with each sprint of 32 story points