

Ryan Cummings  
Alex Ackerlund

- a. Assume during your team's last sprint, that they completed 32 story points using a 3-person team working in sprints of 3 weeks for a total of 45-mandays. Calculate your team's estimated velocity for the next sprint if we still have 3-week sprints, but you now added 2 engineers to the team, and one of them can only work 80% of the time.

Last Sprint's focus factor =  $32/45 \approx 71.1\%$

This sprint =  $71.1\% * (45 + 15 + 15*.8) = 71.1\% * 72 \approx 51$  story points

- b. As Clem stated in class. The focus factor for the first sprint on a new team should be about 70% unless your company has a different standard.
- c. Ask the most senior developers on the team to come up with an estimate. Trust their experience and average the answers. This method is inferior to the poker method for a number of reasons. It fails to account for the inexperienced members of the team. Additionally, even experienced developers have trouble estimating accurately. It also reduces the chances of foreseeing edge cases that could cause delays. By not getting input from everyone on the team you could skip over vital pieces of information that will change how long the project will take.
- d. See other page
- e. public class Node  
{  
    public int data;

```

    public node left;
    public node right;
    public Node(int data, Node left, Node right)
    {
        this.data = data;
        this.left = left;
        this.right = right;
    }
}

```

f. See other page

g. Public class Employee\_Record

```

{
    Public String name;
    Public int ssn;
    Public int salary;
    Public Employee_Record(String name, int ssn, int salary)
    {
        This.name = name;
        This.ssn = ssn;
        This.salary = salary;
    }
}

```

Public class Node

```

{
    Employee_Record data;
    Node next;
    Public Node(Employee_Record data, Node next)
    {
        This.data = data;
        This.next = next;
    }
}

```

}

}