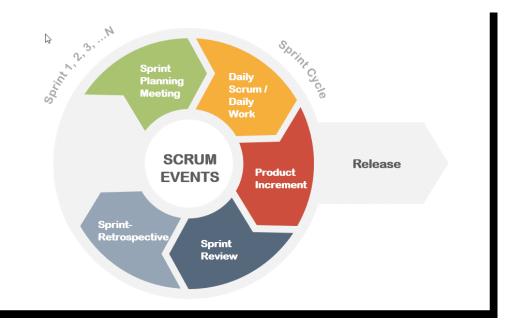
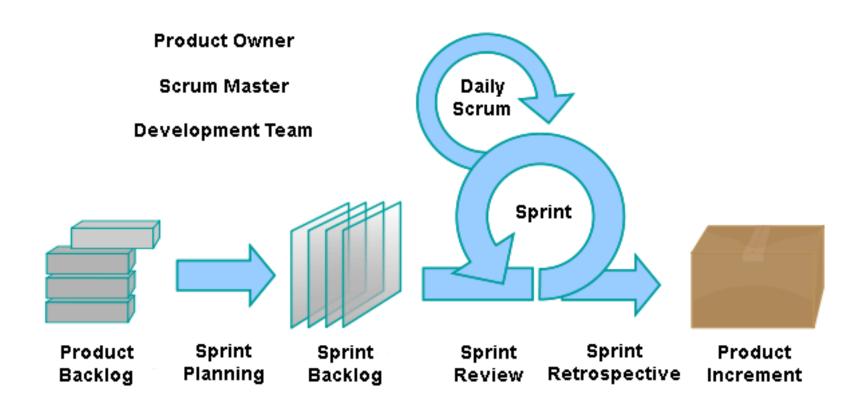
# SCRUM Events MIS3535 | LEAD GLOBAL DIGITAL PROJECTS





### **SCRUM FLOW**



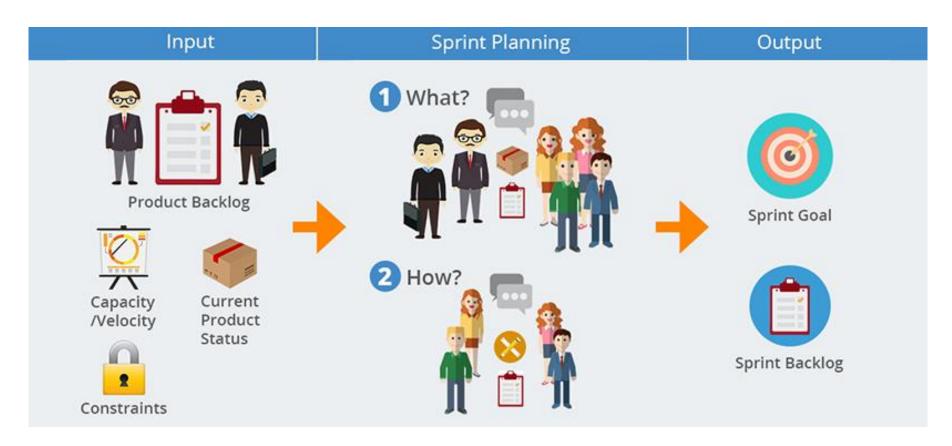


### SPRINT – AN ITERATION IN SCRUM

- The heart of Scrum is a Sprint, a time-box of one month or less during which a "Done", useable, and potentially releasable product Increment is created. Sprints best have consistent durations throughout a development effort.
- Sprint length should be short enough to accommodate changes of stakeholders and long enough for the team to produce an Increment.
- A new Sprint starts immediately after the conclusion of the previous Sprint.
- Sprint contains and consists of the Sprint Planning, Daily Scrums,
   Product Increment, Sprint Review, and Sprint Retrospective.



### **SPRINT PLANNING**



### TIME BOXED TO 2 HOURS PER SPRINT WEEK



### **SPRINT GOAL**





### **BAD GOALS**

- Complete these 4 stories and fix 5 bugs.
- Improve the functionality in a way users will like it.

# **GOOD GOALS** (Outcome Based, Validate an assumption, Address a risk )

- New Customers should be able to pay with bank transfer.
- Check if the conversion rate can be increased by 20%.
- Provide a standardized middleware mechanism for the identified customer service transactions to access the backend database.

### Reminder!

SMART GOALS: Specific, Measurable, Attainable, Relevant, and Time-bound



# **SPRINT GOAL (continued)**

- Each Sprint should have an explicit sprint goal. The elevator pitch for the sprint.
- Envisioned by PO before, the entire team collectively agrees to the sprint goal by the end of the planning meeting.
- Usually written out on the scrum board.
- During the planning meeting the scrum team commits to the sprint goal, not a bunch of stories.

Why Sprint Goal?

The Goal helps the team collectively focus on one objective to achieve and not independently work on individual stories.

It helps in making trade-off on the actual scope of the functionalities. Sometimes the team can achieve the sprint goal without completing all stories.



### **DEV TEAM'S COMMITMENT TO THE PO:**

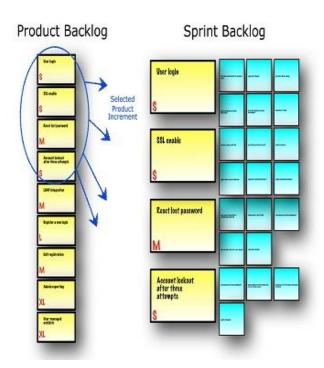
### We promise that...

- 1. We believe we can reach the sprint goal by end of the sprint.
- 2. We will do everything in our power to reach the goal and will inform you immediately of any problems.
- 3. Every story we complete, the corresponding code will be in a releasable status by the end of the sprint.
- 4. If we fall behind schedule, we will consult you and together we may adjust the scope ( without affecting the goal as much as possible )
- 5. If we get ahead of schedule, we will consult you and add stories from the backlog that will add more value to the goal
- 6. We will display our progress and status on a daily basis. We may be early sometimes or late sometimes but will document this variation in our velocity.



### **SPRINT BACKLOG**

Sprint Backlog should be created to the extent possible in the planning meeting and can always be modified/added by the Dev team as and when they get identified by team during the sprint.





### **IMPLEMENT PHASE**

- > Create deliverables to achieve Sprint Goal
- Conduct Daily Scrum / Daily Stand-Up
- **→** Groom Prioritized Backlog



### TASK PLANNING ON SCRUM BOARD

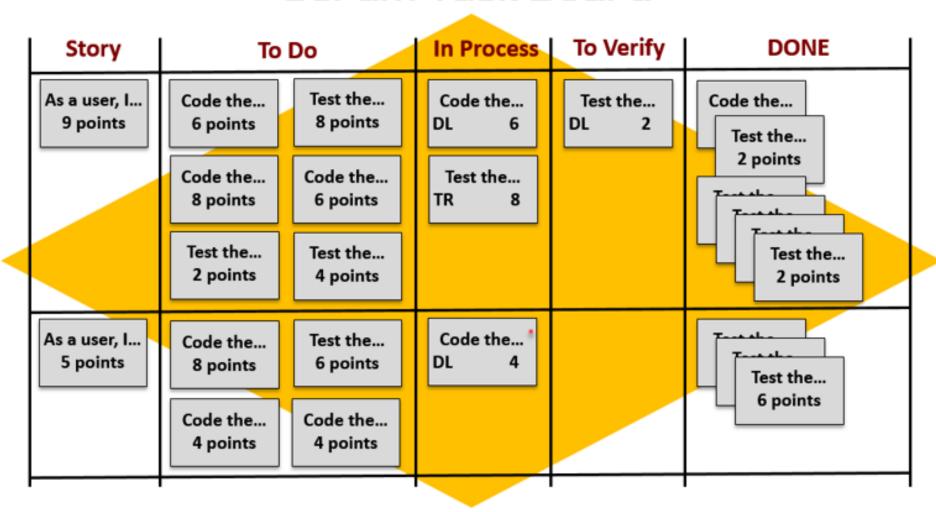
SPRINT GOAL: New customers should be able to pay using bank transfers.

Story	To Do	In Progress	To Verify	Done
=				
		Scrum	Board	
			=	
		TECYNO-PM		_
三				



#### **SCRUM BOARD EXAMPLE**

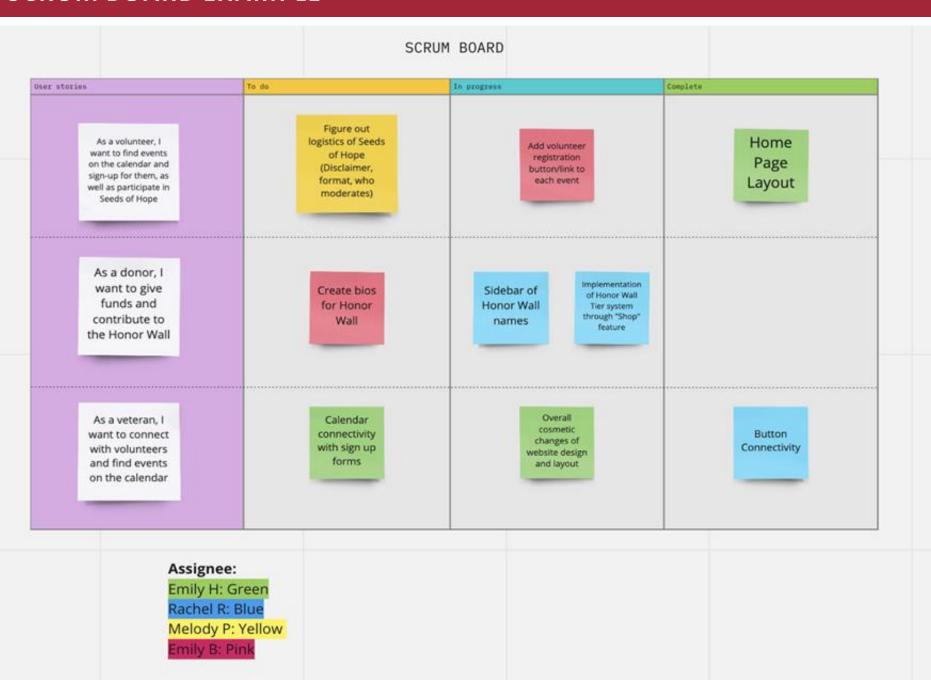
### Scrum Task Board



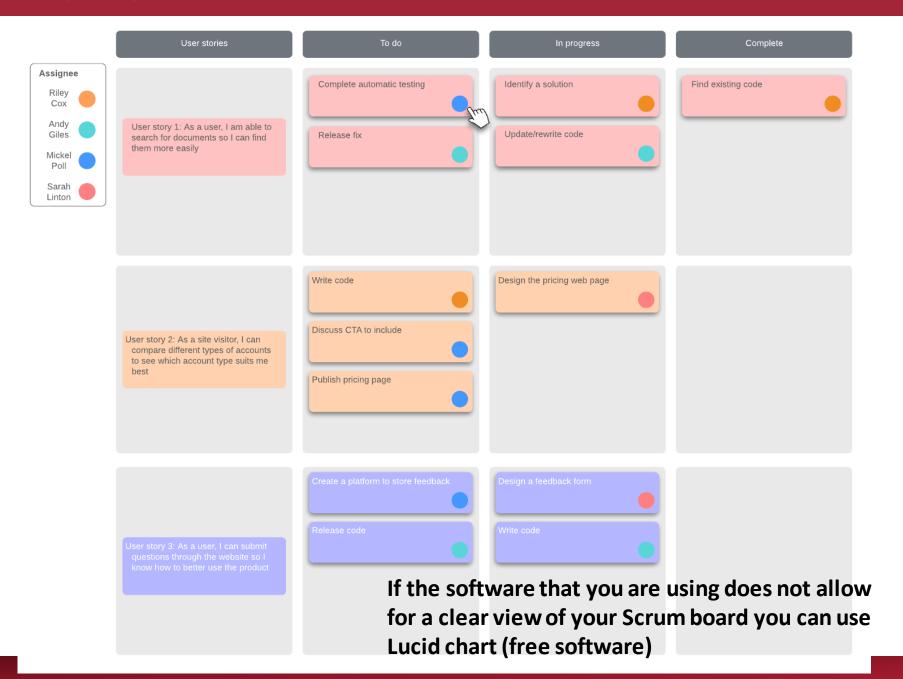


Make sure to clearly identify who is working on the task (color or name)

#### **SCRUM BOARD EXAMPLE**



### **SCRUM BOARD EXAMPLE**



### **DON'T WATERFALL ITERATIONS**





### **KEEPING THE CODE AGILE**

- Test-first programming (or perhaps Test-Driven Development)
- Rigorous, regular refactoring
- Code review
- Continuous integration
- Simple design
- Pair programming (If possible)
- Sharing the codebase between all or most programmers
- A single coding standard to which all programmers adhere
- A common "war-room" style work area
- Technical debt should be kept under control



### **SPRINT DELIVERABLES**

- The team works on the tasks in the Sprint Backlog to create Sprint Goal (Product Increment).
- The team is completely independent and self organized.
- Product Owner and Scrum Master are available for any assistance.



### PO ROLE DURING SPRINT

- Do not interfere in team's Daily work. Leave them alone.
- Always be available to answer team's questions.
- Collaborate with team to achieve the sprint goal.
- Work with stakeholders in getting feedback and future needs. Stakeholder engagement is important.
- Collect new requirements and refine the backlog taking team's input for future sprint(s).



# DAILY SCRUM / DAILY STAND-UP

# **3 Important Questions:**



- 1) What work did you complete yesterday?
- 2) What have you planned for today?
- 3) Are you facing any problems or issues?

TIME BOXED TO 15 MINUTES
ONLY DEV TEAM IS MANDATORY



### **SPRINT GOAL AND SCOPE**

### **During the Sprint:**

- All effort should be made to ensure no changes are made that would endanger the Sprint Goal
- Scope may be clarified and re-negotiated between the Product Owner and Development Team as more is learned
- Quality goals (Done Criteria) should not be compromised



# PRODUCT BACKLOG REFINEMENT(GROOMING)

- To ensure that the items on the Product Backlog are refined for the next sprint(s), up to 10% of team's sprint time may be used for refining the backlog.
- The Product Backlog is continuously being refined because there may be changes in the requirements or reprioritization that need to be incorporated into the next Sprint.
- The Product Owner may take help from Dev team (or ask them) to prioritize the backlog but must remain responsible.
- Refinement meetings usually take place multiple times during sprint



### **SPRINT REVIEW**

- Dev Team demonstrates the Sprint goal to the Product Owner and Stakeholders
- The team gets feedback on their work and discusses what should be done next
- PO validates whether these deliverables meet the requirements of the Acceptance Criteria
- Items not completed as per the criteria remain in the Product Backlog to be re-prioritized by PO

TIME BOXED to 1 hour per sprint week



# Studio Day (Day 1):

- Start your first sprint today!
- Pull stories from your Product backlog
- Output will be used for your upcoming Sprint Review with the client!
- Your 3<sup>rd</sup> assignment (team submission) is your sprint review presentation.



# Day 2



# What is a spike story?

Team may decide to take a spike on a story and work on answering a question or gathering information, rather than implementing product features. Sometimes a user story is generated and cannot be estimated until the development team does some actual work to resolve a technical question or a design problem. The solution is to create a "spike," which is a story whose purpose is to provide the answer or solution. Like any other story or task, the spike is then given an estimate and included in the sprint backlog.



### **SPRINT CANCEL**

Is it possible to cancel a sprint?

If the output of the sprint is going to be worthless to the company due to some major change in business rules or policies, the sprint is terminated, and a new sprint resumes with new backlog.

Product owner makes the final decision.



### **REVIEW AND RETROSPECT PHASE**

Sprint Review (Demo)

Sprint Retrospective



### **SPRINT RETROSPECTIVE**

- Opportunity for the Scrum Team to take a step back and examine the previous Sprint to identify potential improvements in the process.
- All Team members including the PO attend the meeting, which is facilitated or moderated by the Scrum Master.

TIME BOXED to approx. 1 hour per sprint week (Max 3 hours per month)



### POINTS TO REMEMBER

THREE steps to create a high performing scrum team:

- 1. Its OK for a team to fail
- 2. Make sure the team feels comfortable in admitting its failure in Retrospective meeting
- 3. Find the root cause of the failure and take necessary action



### **SPRINT RETROSPECTIVE**

### **IDENTIFY THREE SPECIFIC THINGS:**

- Things the team needs to keep doing:
  - Best practices
- Things the team needs to begin doing:
  - **Process improvements**
- Things the team needs to stop doing:
  - **Process Problems and Bottlenecks**

It's a good idea for the team to list at least <u>one process</u> <u>improvement item</u> from the retrospective in the next product backlog.



### RELEASE - SHIP DELIVERABLES

- The Accepted Deliverables are up for release to the Stakeholders.
- Not every Sprint ends with a Release.
- The decision of when to release the potentially shippable product increment to the end users is usually made by the PO in collaboration with stakeholders.



### **SCRUM SUMMARY**

# THREE CORE ROLES

- Product Owner
- 2. Scrum Master
- 3. Scrum Team (Dev Team)

### **MAIN ARTIFACTS**

- Vision Statement
- Story Map
- Product Roadmap
- Product Backlog
- Sprint Backlog
- Product Increment
- Definition of Done
- Scrum Board
- Burndown Chart

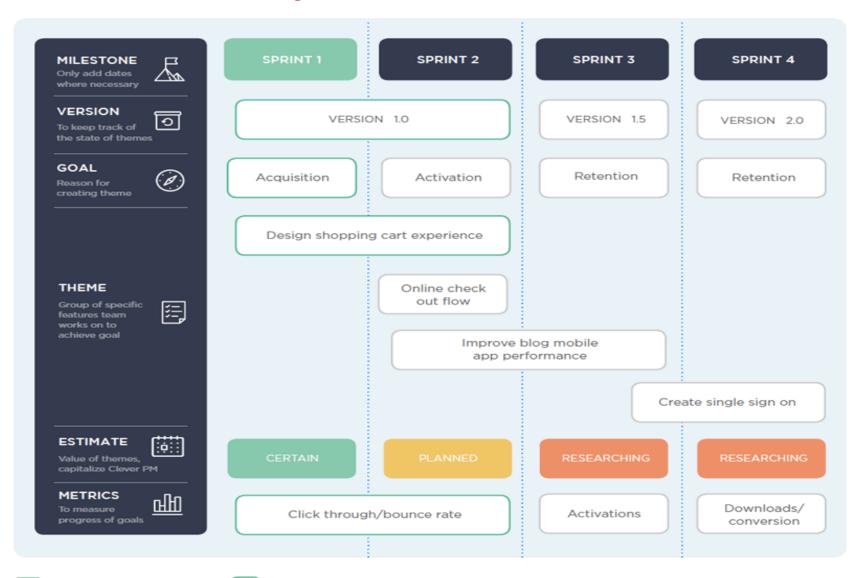
# TIME BOXED CEREMONIES (EVENTS)

- Sprint
- Sprint Planning
- Daily Scrum
- Sprint Review
- Sprint Retrospective



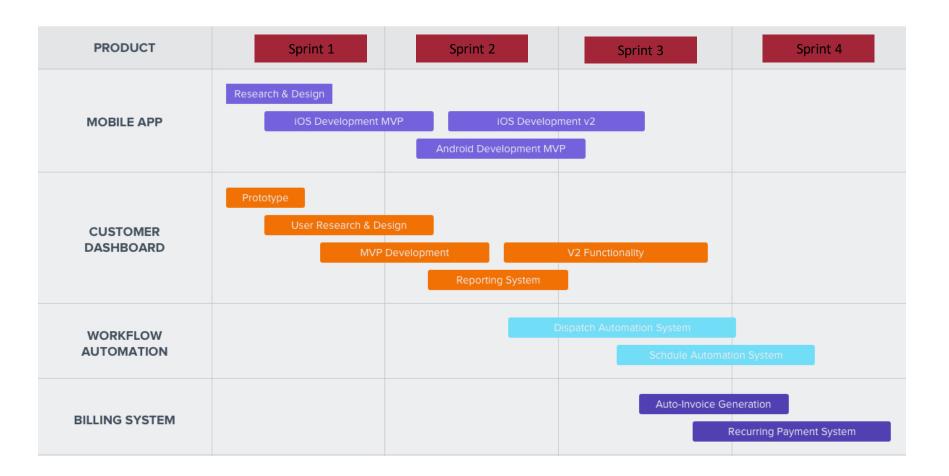
# **Product roadmap**

Current Sprint / CERTAIN



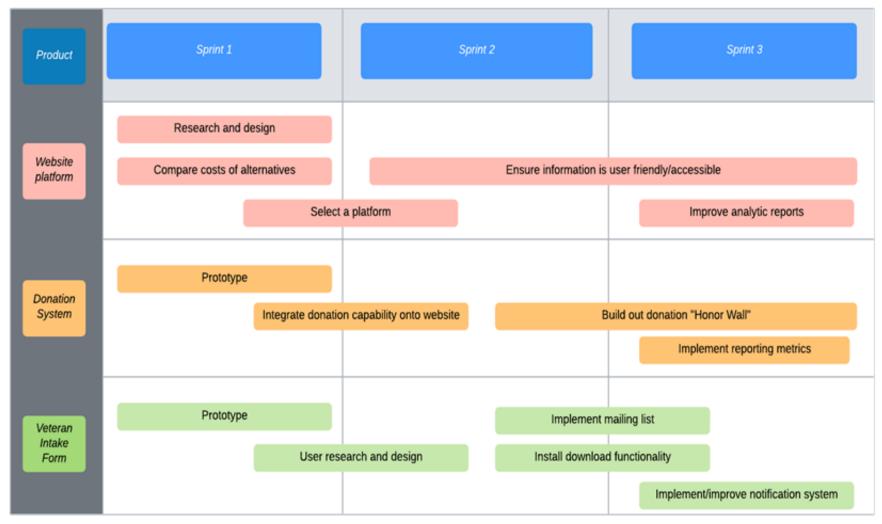
Developing in the current sprint

# Product roadmap (another example)





# Product roadmap (another example)



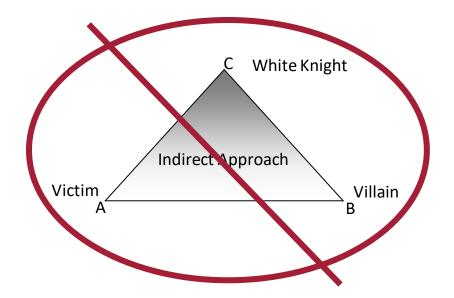


# MANAGING CONFLICT



### **Resolve Conflict Directly**

- ✓ Team member to team member
- ✓ If no resolution, escalate to neutral third party
- ✓ If no resolution, escalate to manager or leader





# CONFLICTS ARE A PROBLEM AND SHOULD BE AVOIDED AT ALL COSTS...RIGHT?

Web research

Conflict is a form of communication.

Understand differences and where possible (not always possible) leverage diversity to create value

Conflict often produces important results, such as new ideas, better alternatives, and motivation to work harder and more collaboratively

Too much conflict can create morale issues, divide the team, and stall the project.

### **BALANCE IS KEY!**



# Question

Define the **5 conflict handling modes**. What are the Pros & Cons? Which one is best?

- 1. Compromise
- 2. Smoothing
- 3. Forcing
- 4. Withdrawal
- 5. Collaborating





# **Coming up:**

- 1) Daily stand up: 3 teams selected randomly starting March 19
- 2) Work on your deliverables / prepare for the sprint review Assignment #3 due March 24
- 3) Sprint Review/Client feedback session Tuesday March 26 (on zoom) all team members need to be present to receive full credit



### **Assignment #3 - Sprint Review (Team Submission)**

### Prepare a slide deck of 4-5 pages in which you will include:

- Title page (include team name/members)
- 2. Your product roadmap
- 3. The progress you have made to date regarding your client project (you can present a feature that you built or are building)
- 4. What is your To Do list until the Final Presentation

You will present to the client and get feedback on your work and discuss what should be done prior to the final presentation.

You will have 8-10 minutes to present including Q&A.

In your slide deck, make sure that:

- You use interesting visual
- Minimum words (for details, use the notes section)
- One page per topic



# Studio Day (Day 2):

- Draft your Product Roadmap for the semester
- Continue working on your digital products (Sprint 1 continuing)

