

Lecture 3: September 14

Project Planning: Planning in Practice

Reminders

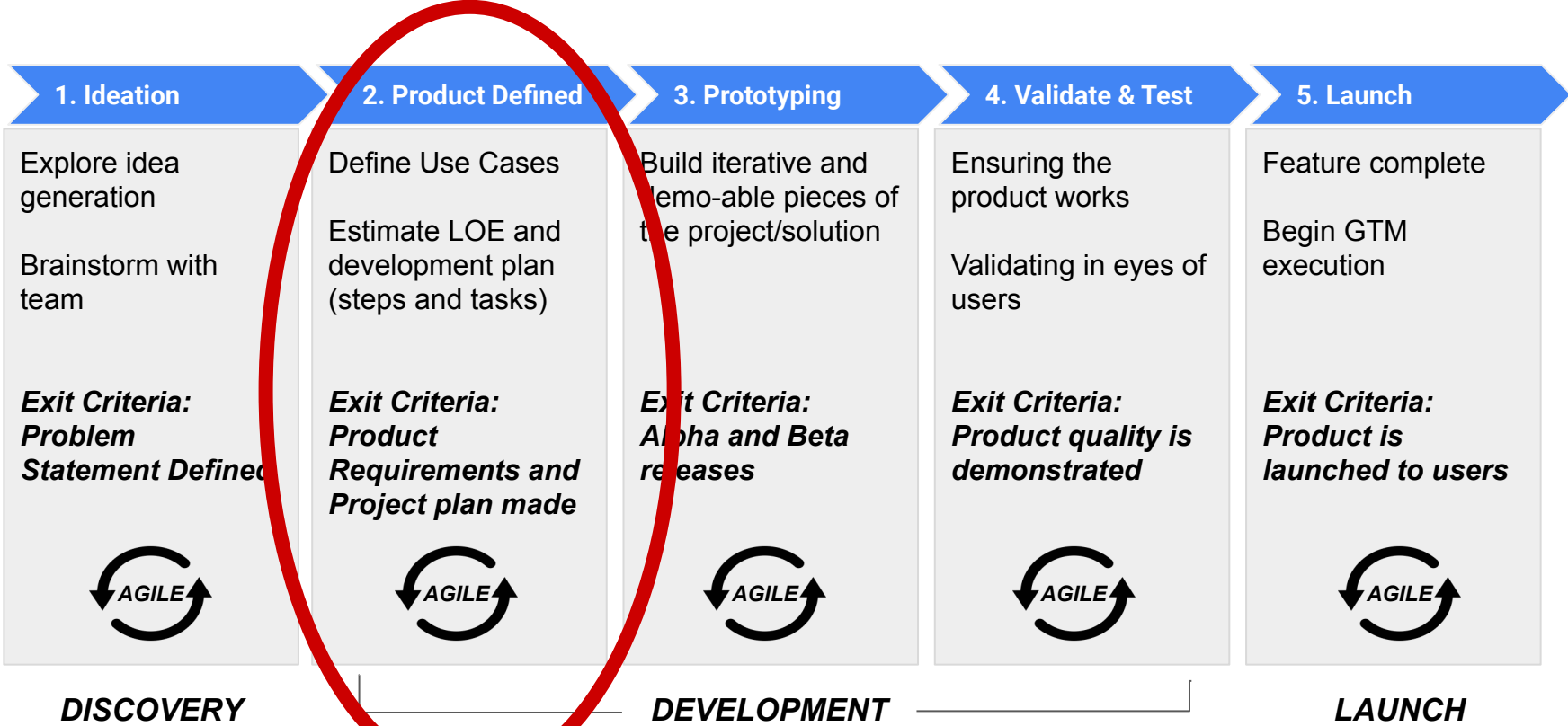
Next week:

- For Tuesday class/Weekly Stand-up:
 - Draft proposal
 - What are your goals?
 - Who are your users?
 - What are the main use cases?
 - Start thinking about list of equipment
- For Wednesday:
 - Interviews over the next 2 weeks
- Presentation Skills
 - Personal skills
 - Team skills

Agenda

- Defining the product
- Creating a stack ranked backlog
- Roadmap and Gantt Charts
- How to plan for Alpha-Beta-Final% demos?
- Scrum Owner, Project Manager, Program Manager

Product Definition Phase



Exit Criteria: PRD and Gantt Chart

The screenshot shows a web browser window displaying a Product Requirements Document (PRD) titled "Product requirements document". The page includes a header with "Comments" and "Public" options. The main content area contains the following sections:

- Target release:** 2019-01-16
- Task:** link to Trello card/Asana task
- Document status:** DRAFT
- Document owner:** @mention owner
- Designer:** @mention lead designer
- Developer:** @mention lead developer
- QA:** @mention lead tester

Goals

- Simplify the user experience
- Reduce friction
- Create engagement

Background and strategic fit

Why are you doing this? How does this relate to your overall business and product strategy?

Assumptions

- Will raise activation by +1% week on week

Requirements

Title	User story	Importance	Notes
Short identifier	Describe what the user should achieve	Must have	Additional considerations

User interaction and design

Include mockups, diagrams or visual designs related to these requirements.

Task Name	Q1 2019			Q2 2019		Q3 2019
	Jan 19	Feb 19	Mar 19	Apr 19	Jun 19	Jul 19
Planning	[Task Bar]					
Research		[Task Bar]				
Design			[Task Bar]			
Implementation				[Task Bar]		
Follow up						[Task Bar]

Product Requirements Document

Section 1: Proposal

Section 2: Specs

Section 3: Considerations, Constraints, Dependencies

Section 4: Open Questions

Section 1: Proposal

Your elevator pitch to your team, stakeholders, investors, etc.

- Goals

What are you hoping to accomplish? What does Success look like?

- Users

Who are you building for?

- Use Cases

What will the user be able to do once you reach Success?

Section 2: Specs

The meaty “what” section to describe the work to be done.

- UX Flow and Designs
 - Mockups
 - Flow Diagrams
- System and Environment Requirements
 - Web or Mobile?
 - OS needed?
 - Libraries or other tooling needed?

Section 3: Considerations, Constraints, Dependencies

Giving awareness into all aspects of the project.

- Limitations to be aware of
- Outside factors that would affect the project outcome
- Other team's or individual's work that must be complete beforehand

Section 4: Open Questions

Central location for all team members and stakeholders to unblock each other and move the project forward. Helps with transparency into blockers/risks.

- What else do you need to know?
- Do you need help or answers from other teams or stakeholders?

Project Plan: Gantt Chart

Task Name	Q1 2019			Q2 2019		Q3 2019
	Jan 19	Feb 19	Mar 19	Apr 19	Jun 19	Jul 19
Planning		■				
Research		■				
Design			■			
Implementation				■		
Follow up					■	

GIST Framework

GIST: Goals, Ideas, Steps, Tasks

Goals: What are your goals?

Ideas: What are your ideas to achieve your goal?

Steps: What are the *steps* to complete your idea?

Tasks: What are the *tasks* to completing that step?

Project Planning using GIST

What are your *goals*?

- Provide users with walking directions during large scale events

What are your *ideas* to achieve those goals?

- Front end app
- Walking algorithm

GIST: Steps and Tasks

What are the **steps** to complete your idea?

- Set up Android app
- Implement Google Maps API
- Build clustering algorithm
- Connect app to server/DB

What are the **tasks** to completing that step?

- **Android App:**
 - Build profile/login/logout capabilities for mobile user
 - Build activity for Social page
- **Google Maps API:**
 - Get Google Maps API keys and integrate
 - Test Google Maps API
- **Clustering algorithm**
 - Research clustering algorithms
 - Build and test
- **Server/DB**
 - Set up server
 - Connect and test with clustering algorithm and Android app

Task

Lowest level of work to be done towards completion of the project

Description/Background

Assignment

Sizing*

Acceptance Criteria

Code Review**

The screenshot shows a Jira task card with the following details:

- Title:** Complete SD Logistics Survey
- Location:** in list Backlog
- Members:** KM (Kate McNally)
- Labels:** High
- Description:** All team members need to complete the survey in order to get assigned teams and mentors. **AC:** All members have submitted the survey on time.
- Sub-tasks:** A progress bar shows 0% completion. The list includes:
 - Reach out to team about availability
 - Decide on team nameAn "Add an item" button is present below the list.
- Activity:** A comment box with "Write a comment..." and a "Hide Details" button. Below it, a log entry states: "Kate McNally added Sub-tasks to this card".
- Right-hand Panel:** Contains options to "Add to card" (Members, Labels, Checklist, Dates, Attachment, Cover, Custom Fields) and "Power-Ups" (Add Power-Ups, Add button).

Building the stack-ranked backlog

GOAL	IDEA	STEP	TASK
Optimize Walking Directions	Android App	Setup App	Build Home
Optimize Walking Directions	Android App	Setup App	Build Profiles
Optimize Walking Directions	Android App	Google Maps	Get API Keys
Optimize Walking Directions	Android App	Google Maps	Show Map on app
Optimize Walking Directions	Android App	Social Feed	Build table for feed
Optimize Walking Directions	Android App	Social Feed	Set table data source to get all user's friends' activity
Optimize Walking Directions	Cluster Algorithm	Algorithm	Research clustering algo.
Optimize Walking Directions	Cluster Algorithm	Algorithm	Create "dummy" locations dataset for testing
Optimize Walking Directions	Cluster Algorithm	Algorithm	Implement algorithm
Optimize Walking Directions	Cluster Algorithm	Algorithm	Test with dummy datasets
Optimize Walking Directions	Cluster Algorithm	Server/DB	Implement server
Optimize Walking Directions	Cluster Algorithm	Server/DB	Connect algorithm to app

Reviewing and Sizing

T-Shirt Sizing

Fibonacci Pointing System

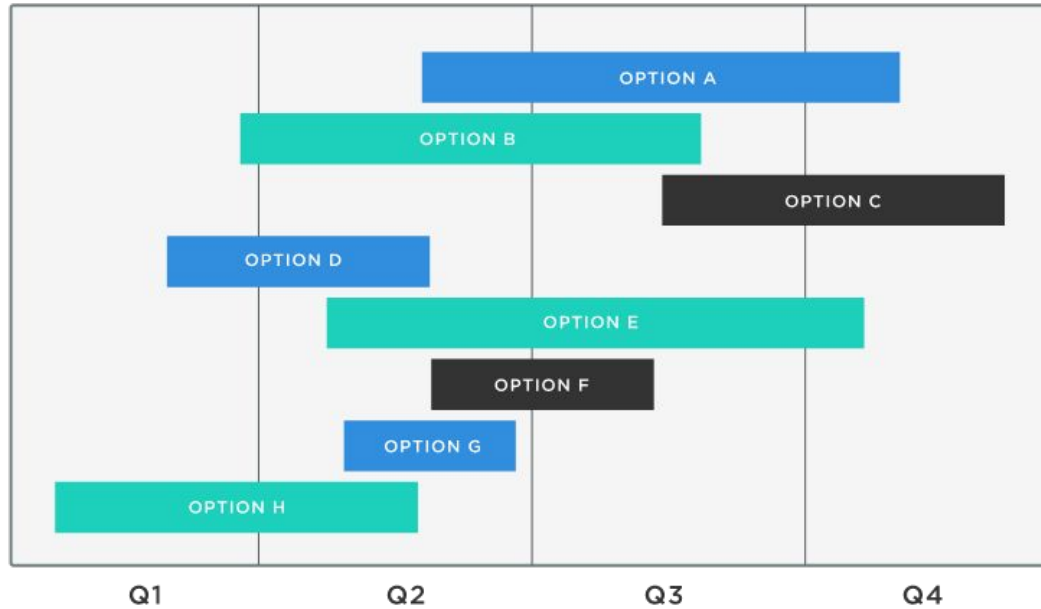
Size	Pointing Point	Weeks
XS	1	0.25
S	2	0.5
M	5	1
L	8	2
XL	13	3

Put it all together

<i>Goal</i>	<i>Idea</i>	<i>Step</i>	<i>Task</i>	<i>Points</i>	<i>Start Date</i>
Optimize Walking Directions	Android App	Setup App	Build Home	2	October 1
Optimize Walking Directions	Android App	Setup App	Build Profiles	3	October 15

	execution		Development readiness	# of dev Sprints	% COMPLETE	Fall			Spring			
	shaping	Epic				October	November	December	January	February	March	April
Goal	Idea	Steps	Status	t-shirt								
Waze for Walking	Android App	Build Home	In Progress	1	10%	█	█	█				
Waze for Walking	Android App	Build Profiles	To do	1.5	0%		█	█	█	█		
Waze for Walking	Android App	Connect Algorithm		0.75	0%				█	█		
...							

Gantt Chart - Negotiating Timelines



Creating a stack-ranked backlog

What is everything that you could possibly do for the project?

What are the dependencies?

Will you need to use another library?

Is there an order to which the work has to be done?

What are the priorities?

Is everything important to build?

Can you determine which are requirements vs nice-to-have?

(Review Gantt Template)

Team Workshop

Gantt Chart: Create a Gantt chart for your project using the template provided on the site

User Story

User experience/behavior that you are building

Background

User Story

“As *<user persona>*, I would like to ____ so that I can ____”

Success Criteria

Testing

Documentation/Published Update

Team Workshop

Your own user story: Break down a user story for your project

Alpha → Beta → Final (GA)

Alpha

“Initial MVP of value”

Beta

“You can take on more customers, but not everyone”

Final (GA)

“Everyone can use it”

When to know if it's ready for Alpha, Beta, or GA; “Drawing the line” on stack rank

Scrum Owner

Who? Roles and Responsibilities?

- Helps create Gantt chart and guide team in setting project plans
- Updates and Manages roadmap/project planning

Industry?

- Software, technology

Project Manager

Who? Roles and Responsibilities?

- Helps create Gantt chart and guide team in setting project plans
- Updates and Manages roadmap/project planning

Industry?

- You can find this role at almost any company, no matter the product, project, or team

Program Manager

Who? Roles and Responsibilities?

- Similar to Project Manager but overseeing larger portfolio of projects

Industry?

- Big organizations have “Programs” to manage products and projects