

Chapters 10 and 11 notes

Chapter 10 Product Definition

- you should have the following so far
 - Stakeholder requirements
 - Competitive analysis
 - User requests
 - User research insights
 - Persona and profile discussions
 - User flows
 - Journey maps
 - And your own creative mind
- now we need to
 - Give structure to your ideas
 - Estimate effort and determine priorities
 - Define chosen ideas and prepare them for product design

structuring Ideas

- Understand and compare each other's idea's potential value for users and the business
- Estimate the idea's design and development effort
- Prioritize which to work on, in which order
- Describe concrete needs, possibilities, and constraints to inform the design effort.
- Determine functional specifications that will ready the ideas for development and Quality Assurance efforts

three levels of ideas that you could use for the discussion

1. High level: Passengers can change or upgrade their assigned seat before purchasing the ticket
2. Mid level: Passengers can choose their seat using a map of seats for that plane
3. Low level: Passengers can select an available seat from the seat map and see an updated cost

User stories, Features and Epics

User story : is a unit of work for the product team, written from the point of view of a user, and ideally of a size that can be completed by the team within one development sprint

- the structure of a user story is meant to connect to the *user role* with the *action* they're taking and the *goal* that prompted their action

As a **[User role]** I want to **[action]** so I can **[goal]**

As a **Passenger**, I want to **change my seat assignment** So I can **Sit closer to the front of the plane**.

Related actions

- Review a map of seats to see which one is currently in, which are unavailable and which are available with related costs.
- Select an available seat
- Review the updated total
- Confirm or cancel my change

Acceptance criteria : details on what needs to be present in the product in order for the story to be considered complete by the product manager and Quality Assurance team.

Feature : a distinct piece of functionality with a benefit to the user and business

function : a unit of development work that enables the product more behind the scenes

Epics : a collection of related user stories or features, typically at a level that implies a longer-term scope of work or ongoing need for iterative improvement.

There are a few ways terms are used to group and give structure to ideas including

- themes relate stories that may belong to different epics
- Initiatives have more of a project orientation, something with an expected outcome and time period associated with it.
- user activities are user-centric ways to structure the product's hierarchy from top to bottom using the user's journey
- Jobs to be done (JTBD) form a customer-centric framework that focuses on the jobs that people need done rather than on products and their features.

Prioritization

- Prioritizing outcomes, such as "increase the percentage of users who complete the booking process once they've initiated it"
- prioritizing features, such as our "change seating" example
- prioritizing user stories, such as our "select an available seat" example

Prioritization techniques

techniques vary based on

- how collaborative you can make your prioritization process
- What level of idea you'd like to prioritize (high, mid, low)
- How much you already know about the industry product feature set, or technology you'll be using
- what is its value to the business and its customers
- what complexity is involved in implementing the idea?
- we can list ideas and then rank them on their complexity and the value they add

Roles in Prioritization

- Business advocate: represents the business needs and requirements and ensures they are captured and met as faithfully as possible.
- User advocate: represents the needs and perspectives of the primary users who will experience the site
- Development advocate: represents the needs and constraints of development and quality assurance teams
- Outcome advocate: represents the purpose of the initiative and drives the team toward desired outcomes

conflicts

- the team is not on the same page about the project objectives or underlying business strategies
- opposing team members are closely tied to a certain set of features
- there are conflicts between business needs and user needs that are not easily resolved
- the technologies being used are relatively new to the development team, so they're uncomfortable making estimates

Feature Definition

Questions

- What is the product vision?
- What problem are we solving and why?
- What technology considerations should we keep in mind?
- What user insights should we keep in mind?
- What project considerations should we keep in mind?
- Are there any design or guiding principles for this effort?
- What job stories should we include?
- How are we going to measure success?
- How will we determine whether the problem has been solved? What is our desired outcome?
- What do we consider in scope or out of scope for this feature?
- Are there any thought starters the team would like to share?

capture these questions

- in your brain
- feature brief
- kanban board

Get some inspiration but don't get carried away we must get a solid foundation before we can start.

Chapter 11 Design Foundations

Universal Principles

- Visual design principles regarding the relationship between elements in a view
- Interaction principles regarding the way users move through the site's spaces
- psychology principles affecting the way users may perceive and engage with your design

Visual Design

this affects a user's understanding of your brand and often affects the trust placed in the product

Unity and Variety

Unity : is the degree to which elements in your design have an obvious association with each other.

variaety : differences between elements clear and add to a sense of frexhness or exploration

Hierarchy and Dominance

Hierarchy : the established order of the elements being viewed

dominance : Generally, objects that are larger, brighter, and have highter contrast against other objects on the page have more dominance

Simplicity

simplicity : when elements on the page are purposeful, relevant, and informationrich, and when those that aren't are removed - you are able to ensure the information can be eaily digested and acted upon.

- minimalism is good but when it goes too far it can hinder a user's ability to get things done

Interaction

interaction : dstarts with a desire to act and the understanding that something can be acted on

Associations and affordance

keep these in mind when designing objects that need to be acted on

- consider the value of an association with something of common use in the physical world that provides clues on how it is used digitally. Will it be helpful and work well in the digital space?
- Consider the likely *Perceived affordance* of the design element 0 Regardless of whether you use an association with something in the physical world try to follow common standards of interactive elements online
- If you have an international audience, spend some time researching how associations may vary across your user base and adjust your icons or imagery if needed.

Movements and Gestures

economy of motion

- how far is it from the where the user probably is
- are you requiireing uss to switch methods of input0 forexample, from keyboard to mouse or from touchscreen to voice?
- How easy is it to act on the object?

Response

frustration can rise from

- poor performance such as search results taking a long time to return:
- poor error handling
- lack of feedback on results

Psychology

- the emotional effect of an attractive design
- the personal, or intrinsic, motivation people have to take on new challenges within your product
- Social proof - or the effect that second, third, and 164tg opinions and behavior can have on a user's decisions regarding your product

The effect of Attractive design

- people generally perceive that an attractive product is easier to use
- an attractive design builds trust
- Pleasurable products create positive feelings and, as a result, increased creativity.

Flow and Gamification

flow : is the state of deep immersion that people feel when engaged in an actiity that provides a challenge appropriate to their perceived level of skill.

- presentation of an activity that has a clear set of goals
- a particular balance between the challenges presented and the skillset that the participants perceive they have
- clear feedback reagarding th eparticipant's performance as they perform the activity

more engaging products have the following qualities

- well-structured, clearly explained, and consistent rules of interaction
- a series of well-defiened and sequenced goals
- Immersive gamepley, engaging multiple senses
- feedback on performance, with the ability to try challenges multiple times to increase skill
- social interaction, either with fellow game-players or via a community that shares tips and results

Gamification : the process of using game design concepts to engage users in ways that aren't traditionally considered game environments

adding social and competetive elements to a product can really improve the quality and engagement with said product.

Social Proof

- we are social creatures

social proof : of popular support of a particular choice or action

- things like comment sections can be very popular and you decide what applications you want to install based on reviews

Choice Architecture

- this is how something is designed so that the user makes a certain decision

darkpatterns : the choice in a way that encourages people to choose something that has an expense or detriment to themselves but benefits the company.

Product Foundations

you should make sure you ground your project and set your guidelines so that you have principles that people can get behind

Product-specific Design Principles

- base your design principles on research conducted with your target users
- make the main statement snappy and memorable
- add a principle only if it helps focus the team and differentiate the product
- refine your principles collaboratively across the project team.

Design Systems and Standards

design system : is a set of standards, guidelines, and toolkits that typically include

- principles based on user research or best practices such as the ones we covered above
- standards that should be followed such as privacy policies, security practices, and accessibility compliance
- a style guide that illustrates the types of colors, fonts, imagery, logos, and other visual elements that should be used within the product, with guidance on how to use them
- design patterns, which are reusable approaches to a design need, ideally integrated within a design tool so that designers can quickly create mockups that follow the system
- component libraries of reusable elements for common controls or views, which can be used to create anything from clickable prototypes to features that are ready to test with little to no additional development needed.
- material design
- fluent
- carbon
- ADG
- human interface guidelines
- mailchimp

Accessibility

you should design your application with certain people in mind who may not be able to do something normal and is disabled

Essential Questions:

- Why is product definition important?

It can help to give structure to what we have learned so far

- What does Carolyn Chandler mean by defining ideas at "different levels"?

you can see the different levels of ideas from the big picture to the small and well defined

- What is the format of a user story?

As a **[user role]** I want to **[action]** so I can **[goal]**

- How are features and epics related to user stories?

the epic and the feature help to give reason for the user story, user story would be considered lower level

- What does JTBD mean and why is it a useful frame?

Jobs to be done help to form a customer-centric framework that focuses on the jobs that people need done rather than just products and their features.

- Describe two prioritization techniques

Kano Model plots on a graph with satisfaction and functionality Opportunity scoring $\text{Importance} + \max(\text{Importance} - \text{Satisfaction}, 0) = \text{Opportunity}$

- What are the questions you should ask during feature definition?
 - What is the product vision?
 - What problems are we solving and why?
 - What technology considerations should we keep in mind?
 - What user insights should we keep in mind?
 - What project considerations should we keep in mind?
 - Are there any design or guiding principles for this effort?
 - What job stories should we include?
 - How are we going to measure success?
 - How we will determine whether the problem has been solved? What is our desired outcome?
 - What do we consider in scope or out of scope for this feature?
 - Are there any thought starters the team would like to share?
- What are the trade-offs between unity and variety?

if things are the same we are more able to place them together and if they are unique we can better distinguish them although if you are not able to either distinguish or tell that different symbols are together there is no good way of knowing what the symbols are for and what the associated symbols are.

- What is an association?

an association is the way that you connect different distinct ideas.

- What is an affordance?

the degree to which the properties of the object make it clear how it can be used.

- what does skeuomorphism mean?

a design approach that mimics the visual design of a three-dimensional physical object or space

- How is design related to psychology?

You have to understand how people think in order to make a design that makes sense to them.

- What is social proof and why does it matter?

social proof is just acceptance by other people like in comments or likes

- How does accessibility influence design?

You can design your product with the needs of specific people in mind that way they aren't left out.

to be continued check github

Reflection Questions:

- Explain how the product definition stage is a form of design convergence?
- Create a doodle explaining the relationship between a user story, feature, and epic
- Look at the app icons on your phone. Describe three of them in terms of unity and variety compared to the phone's overall design
- How can you improve your understanding of what's going on in other people's heads as a designer?