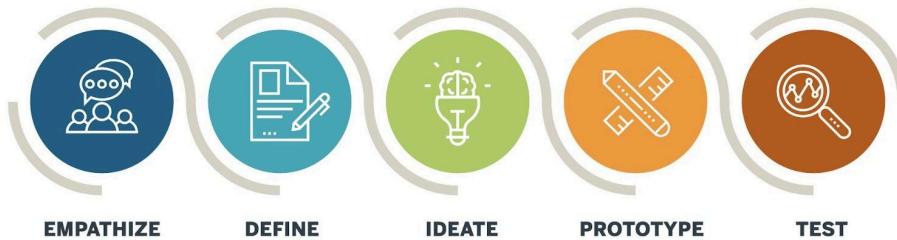


chapter - 5

Ideation

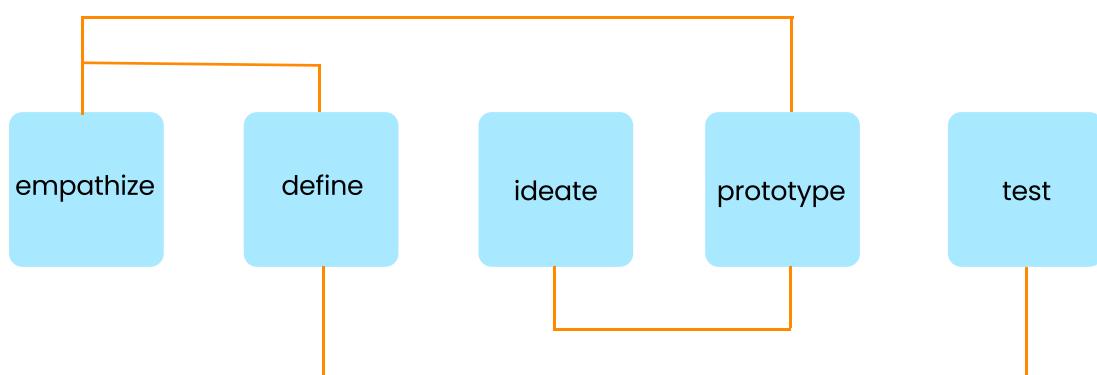
Design Thinking

The method describes a human-centered, iterative design process consisting of 5 steps



Design Thinking

A 5 Stage-Process



These stages are not always sequential. Designers will find the stages often occur in parallel and see repeated use on an iterative basis.

Over view

The process's third stage finds you ready to start generating ideas.

With the knowledge you have gathered in the first two phases, you can start to "think outside the box" to identify new solutions to the problem statement you've created, and you can start to look for alternative ways of viewing the problem.

Ideation

Importance

- Ask the right questions and innovate with a strong focus on your users, their needs, and your insights about them
- Step beyond the obvious solutions and therefore increase the innovation potential of your solution.
- Bring together perspectives and strengths of your team members.
- Uncover unexpected areas of innovation.
- Create volume and variety in your innovation options.
- Get obvious solutions out of your heads, and drive your team beyond them.

Characteristics

Required for Successful Ideation

1. Adapting Ideation Characters

Be able to switch how you see, understand, and extend thinking as new input gets generated.

Best Practice: Transform yourself as your user persona



2. Connecting Ideation Characters

Be able to connect seemingly unrelated concepts, attributes or themes in order to create new possibilities.

Eg: Flipkart adapts VPP from Postal Department process as COD.



3. Disrupting Ideation Characters

Be able to overturn commonly held beliefs, assumptions or norms in order to re-think conventional approaches.

Eg: AirBNB question the beliefs of travel Accommodation.



4. Flipping Ideation Characters

Turn dead-ends or deadlocks into opportunities by flipping them over or rapidly changing direction towards greater viability.

Eg: Registration Process in ECom



5. Dreaming & Imagining Ideation Characters

Be able to visualise a new picture of reality by turning abstract needs into tangible pictures or stories

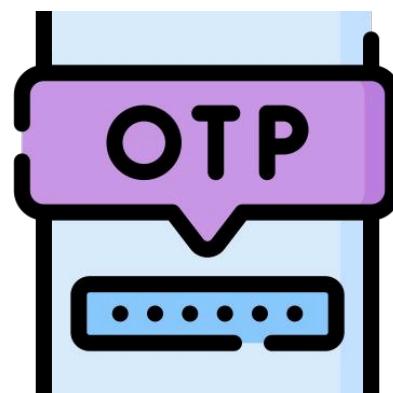
Eg: Storyboarding of a movie, or App



6. Experimental Ideation Characters

Be able to overturn commonly held beliefs, assumptions or norms in order to re-think conventional approaches.

Eg: OTP as password



7. Curiosity

Ideation Characters

Be willing to ask uncomfortable, silly or even crazy questions. Be willing to explore and experience, in order to understand and learn something new and different.

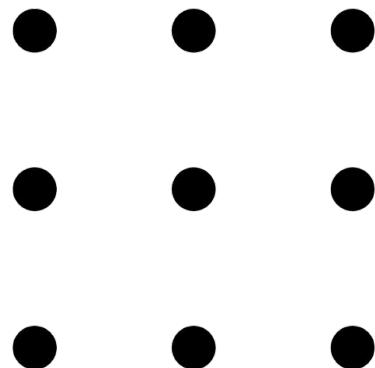
Eg: Sony Walkman



Question: **What if?**

Activity-1

– Create 3 By 3 Dots And Connect The Dots To Create Design. Minimum 6 Designs Will Be Created

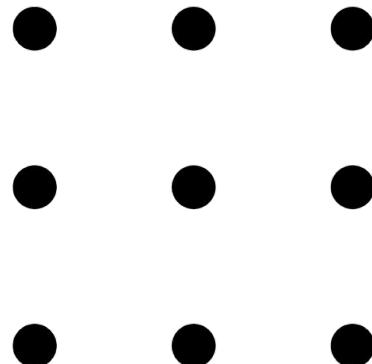


Refer The Image



Activity-2

- Connect All 9 Dots
- Using Only 4 Lines
- Without Taking Your Hand



Refer The Image

Idea Generation

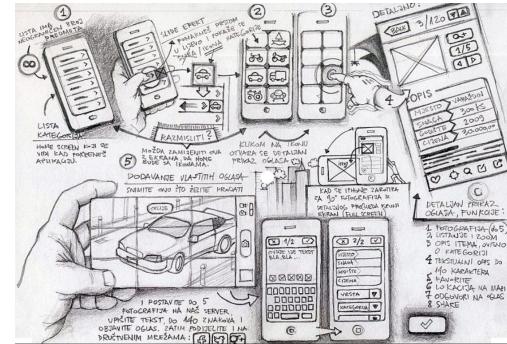
Techniques

1. Sketching / Sketch Storm

Ideation technique

Throughout ideation sessions, a valuable exercise is to express ideas and potential solutions in the form of diagrams and rough sketches instead of merely in words.

Best Practice Sketches should be as simple and rough as possible with just enough detail to convey meaning.



2. Challenge Assumptions

Ideation technique

Challenging your assumptions is an important task that you should do throughout product development.

It may involve any of the followings techniques

- Redefining words in assumptions
- Cross-validating assumptions

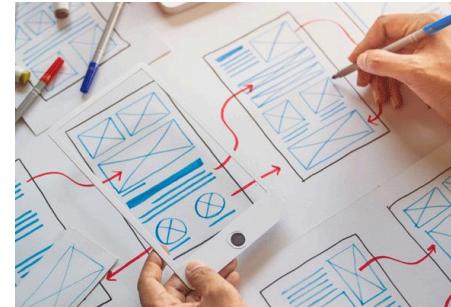


3. Prototype

Ideation technique

When you create prototypes, you're basically sketching/building out ideas before moving on to the final stages of the design process.

The great thing about including prototypes in your ideation technique is that they keep things visual. When your team can envision your idea.



4. Storyboard

Ideation technique

Storyboarding is a nonlinear brainstorming technique that involves developing a visual story related to a problem.

It helps participants explore the problem in depth and come up with potential solutions through bringing the narrative to life.



5. Brainstorming

Ideation technique

Brainstorming is a combination of informal problem solving and lateral thinking. The technique intends for participants to come up with eccentric ideas.

Some of these thoughts and ideas are crafted into original and creative solutions to problems, whereas help to spark additional ideas.



6. Brainwriting

Ideation technique

Brainwriting is an alternative approach to brainstorming. Simply put, instead of asking participants to yell out ideas, you ask them to write them down.

Then, each participant's ideas are passed on to another participant who then reads them out and/or adds new ones.



7. Worst Possible Idea

Ideation technique

It's a great way to get your team's creative juices flowing.

Start by asking participants to collectively create a list of bad ideas.

The winner? The participant who comes up with the most awful, stupid, unthinkable idea.





Best Practices

Idea Generation

- If you are generating ideas alone, then use Sketch Storm, Prototype, Storyboard methods.
- If you are collaborating with team, then implement Brainwriting, Worst Possible Idea and Challenge Assumptions
- Brainstorming is not suitable for team.



Process & Methods

Lean, Agile, and Waterfall

Lean Framework

Process & Methods

The lean framework is a product development philosophy that revolves around cutting all of the unnecessary work or effort until you're absolutely sure you need to do it



Example: Creating a food delivery app

Normally, you would hire drivers, buy a cell phone number, and build the actual app

Being lean means you're not building anything until you know for sure that there is an interest in it

The lean way of doing this is doing everything yourself in the beginning, trying to get as far as you can by using the least amount of resources



Lean Framework

Process & Methods



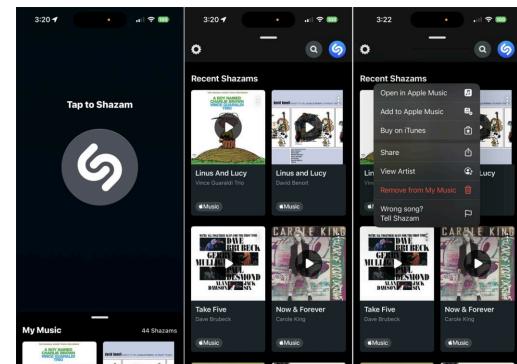
Agile Framework

Process & Methods

Agile is a way of applying the lean mindset to software development

In the Agile framework, we group things into small batches and do them one by one, in order to not waste resources

Example: Researching the most important 2-5 features of a product instead of developing all of them



Scrum Methodology

Process & Methods

1. The sprint planning meeting

- you take the most important features from the top of your product backlog and you move it to the sprint backlog
- you talk about what needs to be done in order to implement it
- you put the work into a project management software, and into tickets



2. The start of the developing process

- a sprint usually takes 2 weeks
- your team works on the tickets by taking them off the top of the sprint backlog and moving them to "In progress" and then to "Done"
- at the end of the 2 weeks, you should have completed everything in the sprint backlog; if not, they go into the next sprint

Sprint Backlog			
Forecast	To-Do	In-Progress	Done

3. Standup meetings

- daily meetings held in the mornings
- people remain standing during the meeting, in order for it to remain brief and concise
- every team member makes a summary of their work



4. Retrospective meetings

- you meet with your team at the end of each sprint
- you talk about 3 main things:
 - the last sprint
 - what went well and what didn't
 - any questions people have



Waterfall Framework

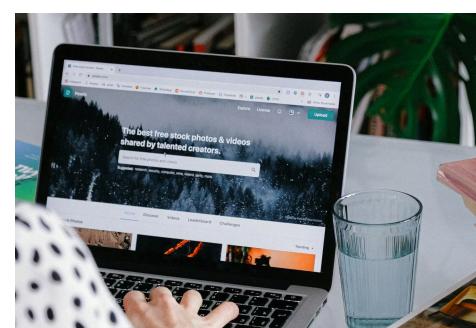
Process & Methods

The Waterfall framework is the opposite of Agile

In the Waterfall framework, we take all the features of a product and develop them all at the same time

Doing things in the Waterfall way is riskier

It's much harder to adapt to the market feedback after you've already built everything



Agile Vs Waterfall

Process & Methods

Agile Example:

Creating a music playlist in a music app

- everyone on the team gets together and decides on core features
- developers create the database, product managers create wireframes
- implementing basic functionality
- everyone is in close communication and collaboration

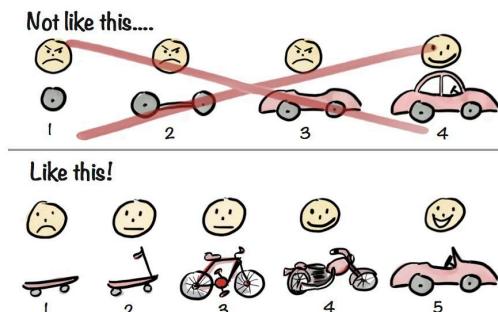
Waterfall Examples:

- Operating systems that can't operate only with a few features
- Engine control systems in cars
- Building skyscrapers

MVP

Minimum Viable Product

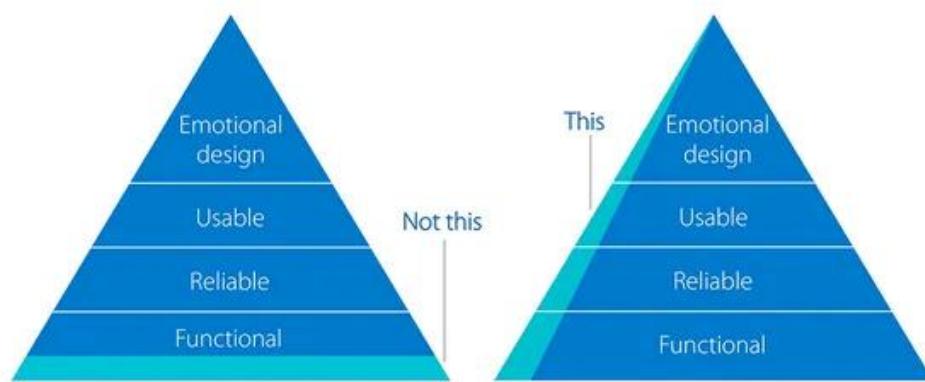
Minimum Viable Product is nothing but the smallest product that you can build that delivers customer value.



Benefits

Minimum Viable Product

- You can test your understanding of whether the product is needed without having to use a huge amount of resources to develop the full product.
- You can minimize the number of wasted hours spent by your development team by focusing on a minimal number of features for launch.
- You can go to market faster and thus, theoretically, start to raise sales revenues faster than if you develop the fully featured final product for launch.



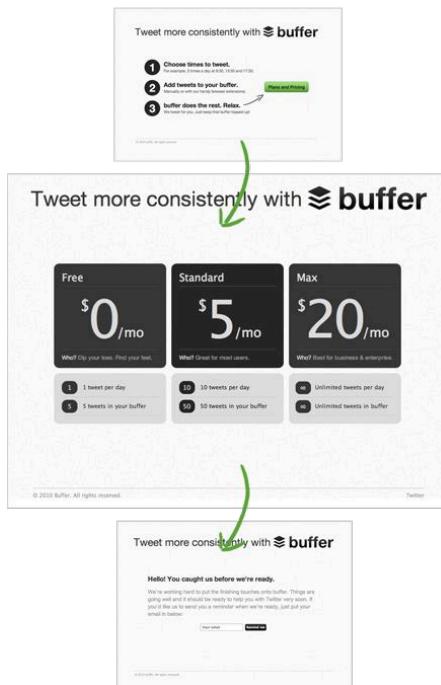


Example

Minimum Viable Product

Buffer's first minimum viable product explained what Buffer was, how it would work, how much it would cost, and had a signup form.

When visitors tried to sign up they were shown a message explaining that the Buffer wasn't ready yet and they could sign up for updates by typing in their email address

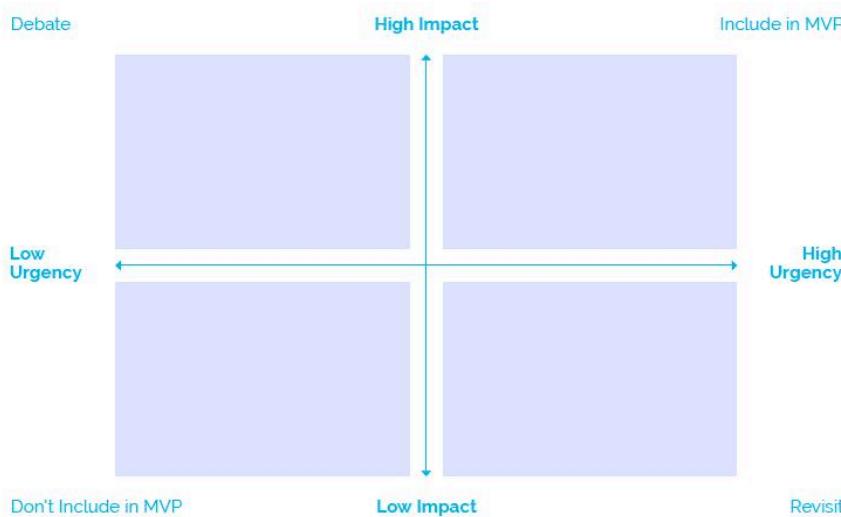


Joel used the email addresses received from the signup form to start conversations with potential users of the product, gaining valuable insight into what they wanted.

By relying solely on landing pages, he was able to validate two hypotheses (people are interested in the product and they would pay for it) for little cost.

Prioritization Matrix

Minimum Viable Product





Prioritization Matrix

Minimum Viable Product

This step helps you identify where you can make the most impact in relation to the urgency of the feature. Using a prioritization matrix, you can make the final decision on what absolutely needs to be included in your MVP, and what features can be included in later releases. It's our recommended format for your MVP prioritization matrix.

MVP Document



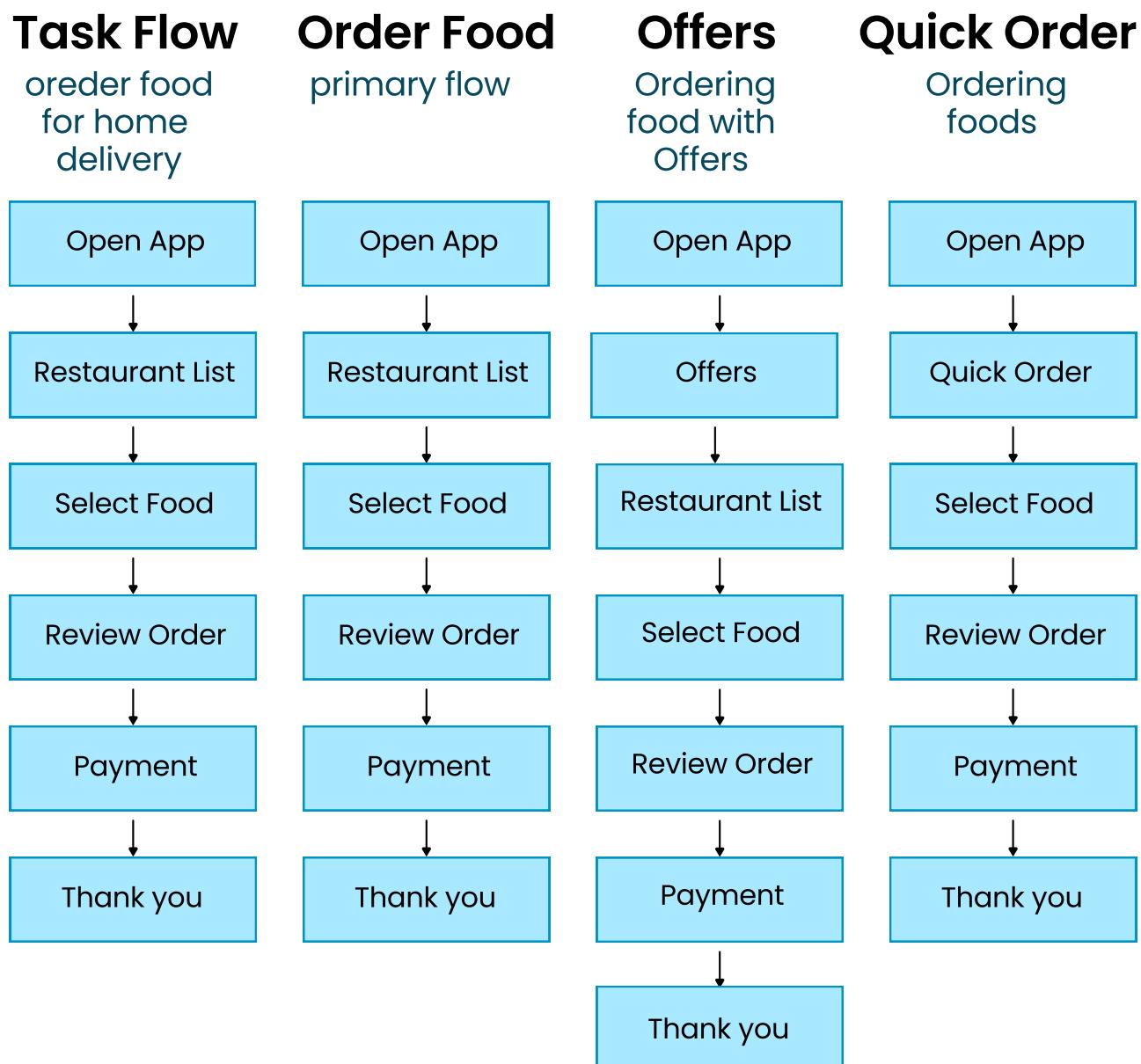
MVP/Reason	User Story	Requirements
Login/Signup User needs the ability to sign up the first time and login for an existing account. Sign in/login will be the default. Other options might follow in later versions.	I as a user want to sign in/ log in with my email to either create an account or get access to the existing.	<ol style="list-style-type: none">1. Sign up for an account with email.2. Login to an existing account with email and password.3. Password set up

Activity

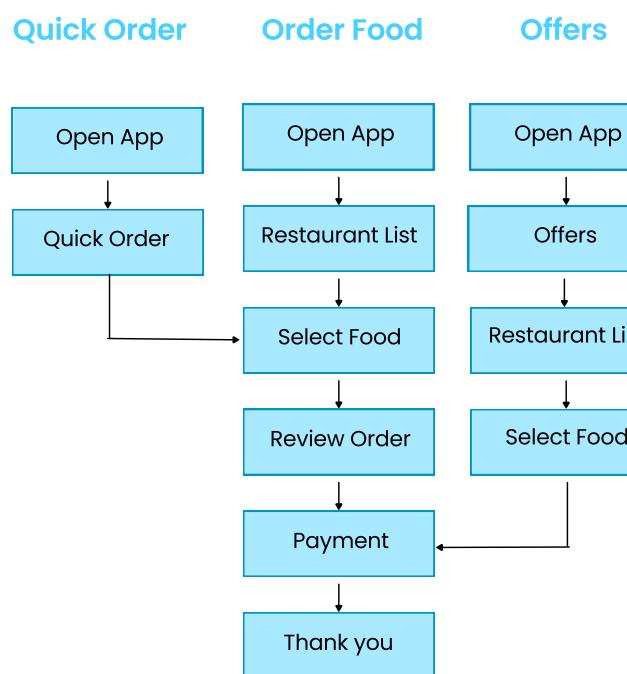
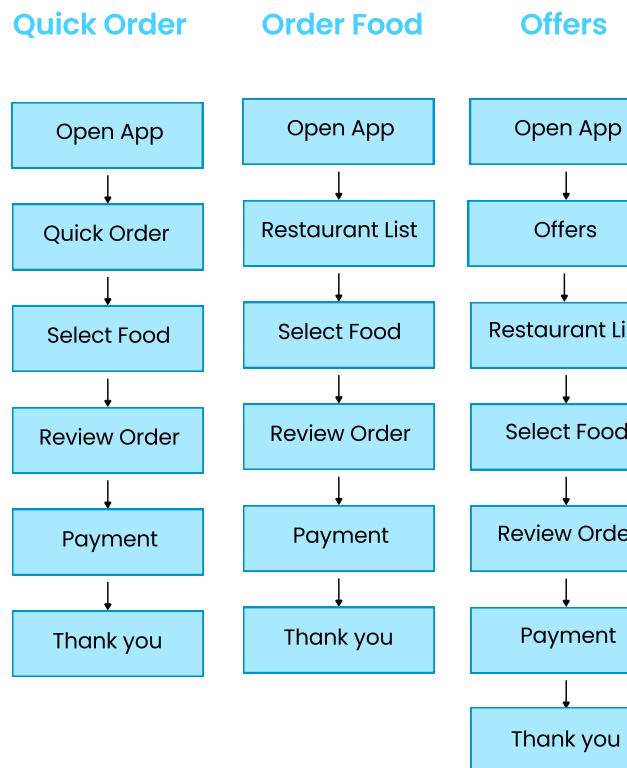
Prepare Scope Document For Your Project

Task Flow

Task flows focus on how users travel through the platform while performing a specific task. They generally show only one path and don't include multiple branches or pathways like a traditional user flow might. These are best used when the task being analyzed is accomplished similarly by all users.



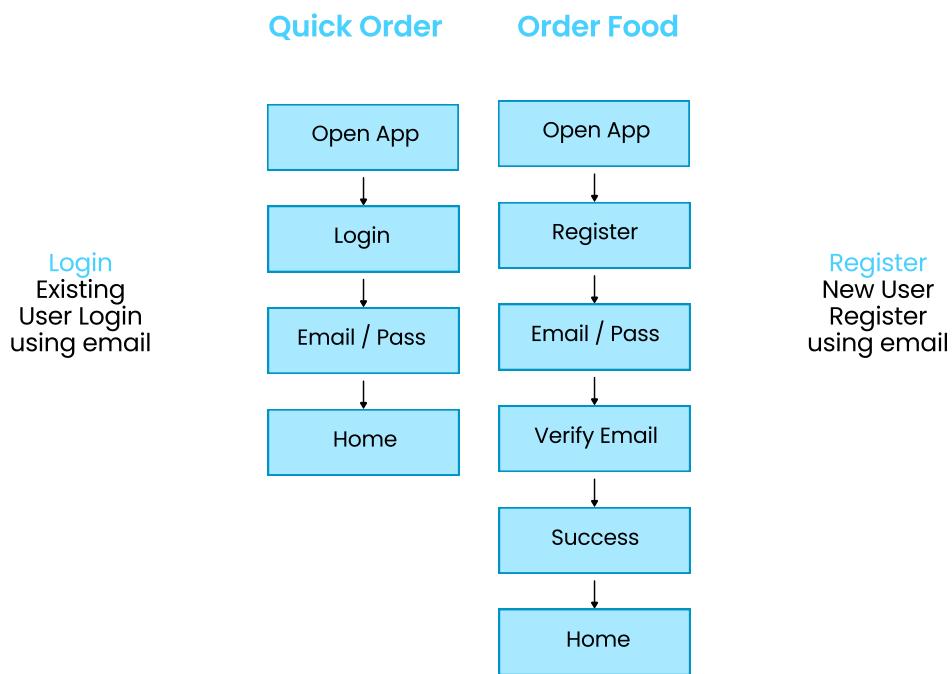
Merge Ordering Food Task Flows



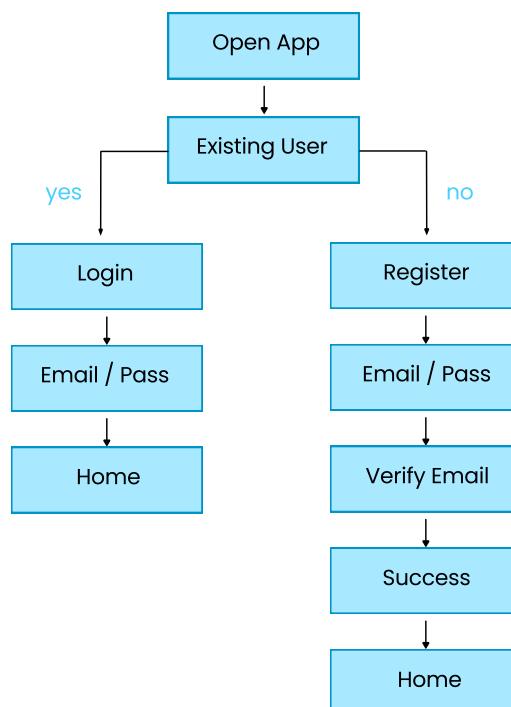


Login & Register

User Access Module



Merge User Module Flows



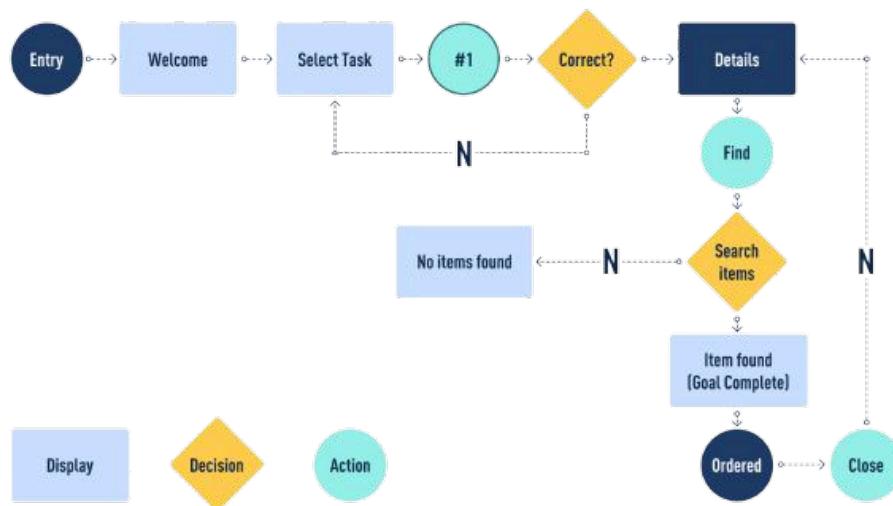
Activity

Create User Flow For Your Project

User Flow

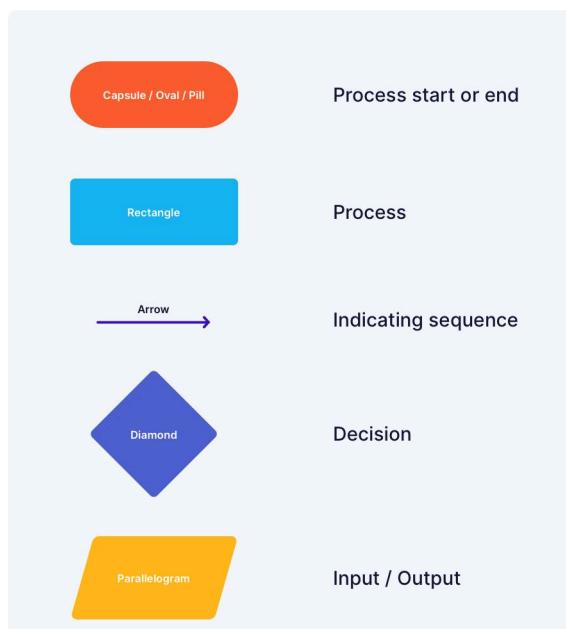
Overview

User Flows visualize the complete path (Sets of actions) that users follow across the whole solution (app/website)



Key Elements

Of User Flow

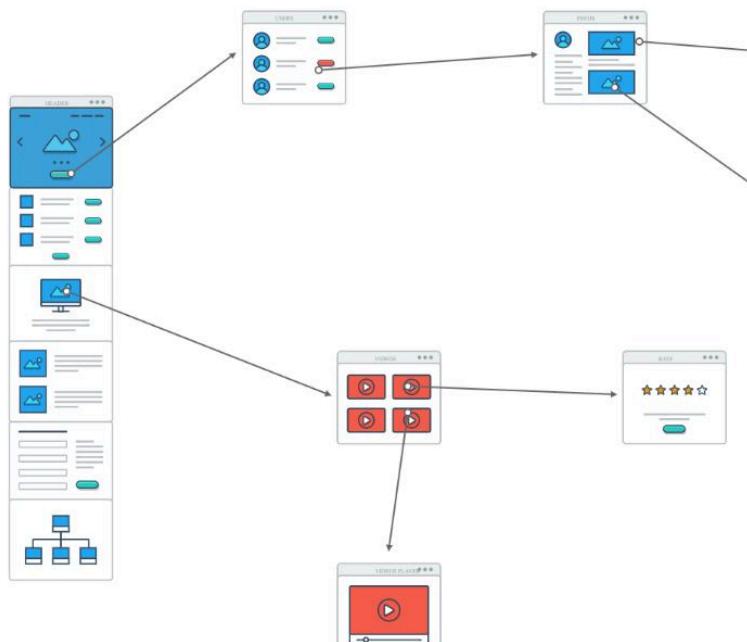


Wireflows

Overview

A combination of wireframes and user flow.

Wireflows are a design-specification format that combines wireframe-style page layout designs with a simplified flowchart-like way of representing interactions.

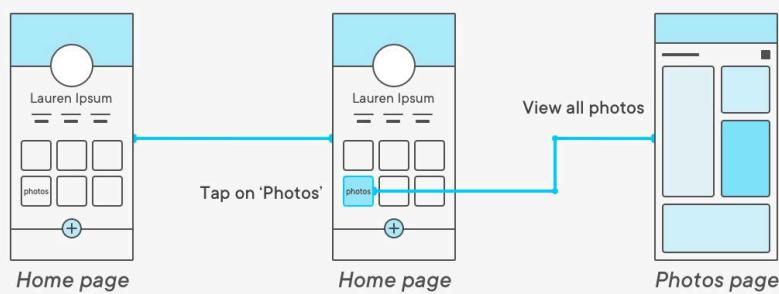


Wireflows

DEFINITION

A combination of wireframes and flowcharts. They document workflow & screen designs when there are few pages that change dynamically.*

EXAMPLE

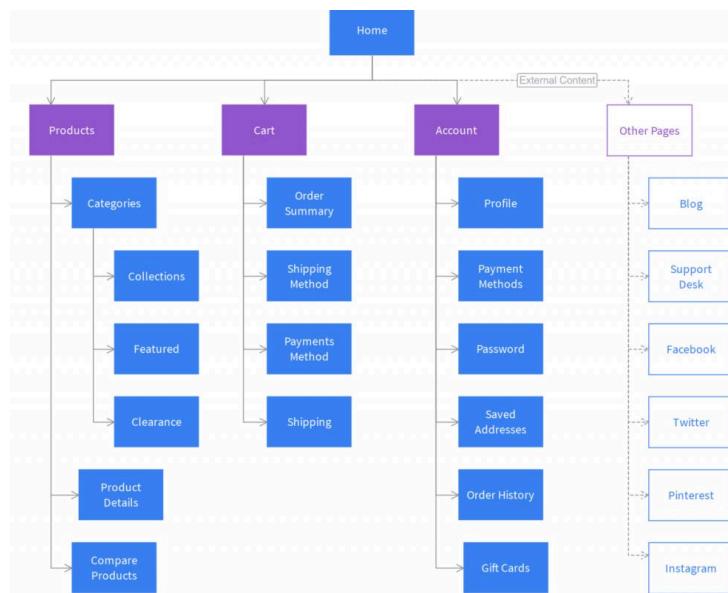




Information Architecture

Overview

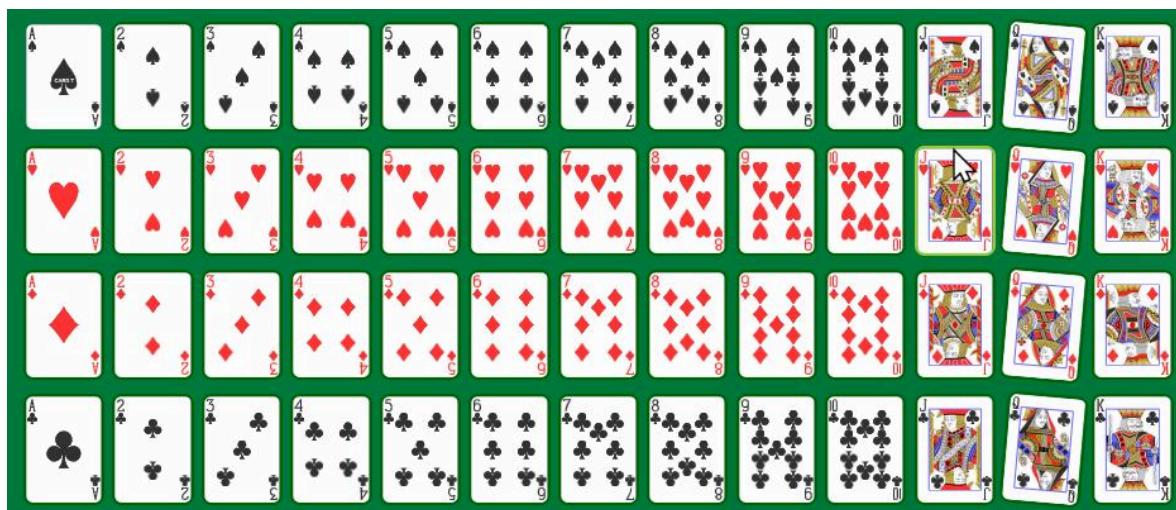
Information Architecture is the creation of a structure for a website, app, or other products, that allows users to understand where they are — and where the information they want is — in relation to their current position.



Information Architecture E-Commerce Website

Tree Tests

Card Sorting for IA

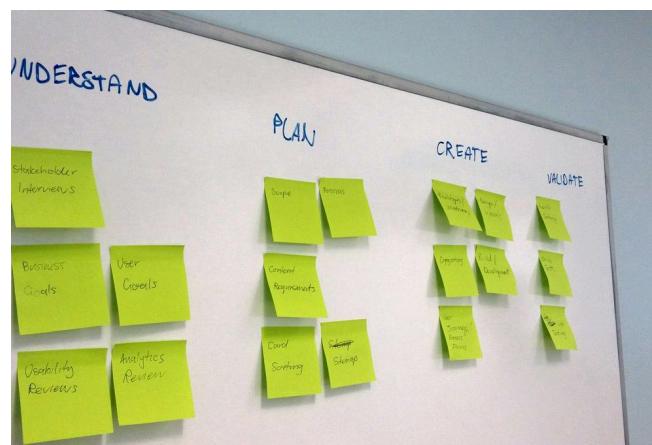


Tree Tests

Card Sorting for IA

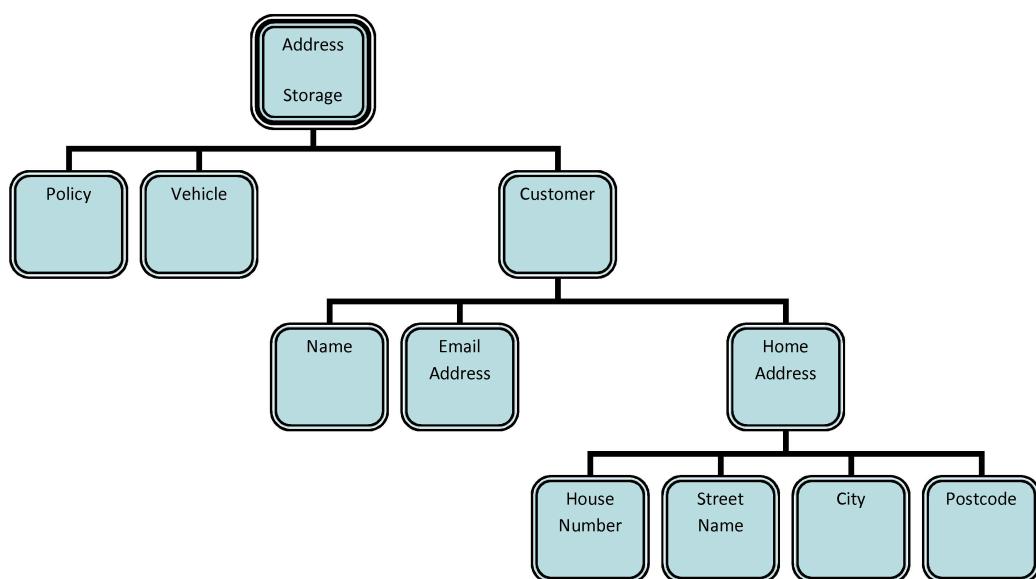
However, unlike in a usability test, the user doesn't see a screen when they choose a site section. Instead, they will see the next level of the architecture.

The goal is to identify whether information is categorized correctly, and how appropriately the nomenclature reflects the sections of the site.



Tree Tests

Card Sorting for IA



Activity

Build Information Architecture For Your Project



Scope Document

Overview

In software development company using below terminologies for developing an application

BRD - business Requirement Document

SRD - software requirement document

FRD - functional requirement document

	Business Requirements Document (BRD)	Software Requirement Specifications (SRS)	Functional Requirement Specifications (FRS)
Other names		Product Requirements Document (PRD) and System Requirements Specification	Functional Specifications Document (FSD), Product Specification Document (PSD), Functional Specs (FS)
Created By	Business Analyst	Business/System Analyst	Business/System Analyst/Implementation Leads
Contains	High level business requirements and stakeholder requirements	Detailed functional requirements, non-functional requirements and use cases	Granular functional requirements, data flow and UML diagrams
Used By	Upper and middle management	Project managers, SMEs (subject matter experts), technical and implementation lead	Technical leads, development teams and testing teams.
Prepared in	Initiation phase	Planning phase	Planning phase
Answers	'Why' the requirements are being undertaken	'What' requirements must be fulfilled to satisfy business needs	'How' exactly the system is expected to function
Example	Improve efficiency by tracking the employee time in office	Proposed software will contain following modules: Login, Administrator, Employee and Reporting	Login module will contain fields like: Enter username, Enter password, Submit button

User Centric Scope Document

Template

In UX design we have to prepare User centric scope document.

It contains,

User Story Feature - convert an idea as feature

Requirement - Technical requirement for the feature.