

**Project Name :**

**Academic Year:**

**Start Date:**

**Duration:**

**Due Date:**

**Students Name & Register No.:**

- 1.
- 2.
- 3.
- 4.

**College Name & Department Name:**

- 1.
- 2.
- 3.
- 4.

**Project Guides  
Name & Sign**

**HOD/ Dean  
Name & Sign**

**Expert  
Name & Sign**

# DT PLAYBOOK

	Duration of Each Phase	Time to complete the project
1		_____
2		Problem Identification: 1300 + unicorns in the world / Y Combinators / Gen AI Elements
3		Project Checklist + User Empathy
4		Create cloning using FSD / LCNC, Team Management Guidance from CF
5		Pitch among peers Customer Sales Pitch (Online/ Physical)
6		BMC Analysis Pitch Desk Preparation
7		Pitch with Mentors/ Industry/ Alumni/ SNS 15

# DT PLAYBOOK

8		<p>Brand the Impact with Story in LinkedIn/ y tube using CGC Preparte a Casebooklet Update their Profile: Resume, GitHub, LinkedIn etc.</p>
9		<p>Pitch with Guide/Mentor</p>
10		<p>Final Pitch</p>
	Post Bootcamp	<p>Hackathon</p>
		<p>Patent/ Journal</p>
		<p>Startup / Revenue Generation</p>

# Project Checklist

Provide ✓ to the completed stages during submission:



	Completed
<b>Empathize:</b> <ul style="list-style-type: none"><li>• Conduct user research to understand the needs, preferences, and pain points of your target audience.</li><li>• Create user personas based on your research findings</li></ul>	
<b>Define:</b> <ul style="list-style-type: none"><li>• Clearly define the problem statement or opportunity you're addressing with your Product/ App.</li><li>• Use tools like problem statements and opportunity maps to articulate this.</li></ul>	
<b>Ideate:</b> <ul style="list-style-type: none"><li>• Brainstorm potential solutions to the defined problem.</li><li>• Encourage creativity and generate a wide range of ideas through techniques like brainstorming sessions or mind mapping.</li></ul>	
<b>Prototype:</b> <ul style="list-style-type: none"><li>• Develop prototypes or mockups of your product/app ideas.</li><li>• Start with low-fidelity prototypes to quickly iterate and gather feedback before investing in high-fidelity prototypes.</li></ul>	

# Project Checklist

	<p><b>Test:</b></p> <ul style="list-style-type: none"><li>• Conduct user testing to gather feedback on your prototypes.</li><li>• Use feedback to refine and improve your product/app design iteratively.</li></ul>	
	<p><b>Iterate:</b></p> <ul style="list-style-type: none"><li>• Continuously refine and iterate on your Product/ App design based on user feedback and testing results.</li><li>• Embrace a mindset of continuous improvement throughout the development process.</li></ul>	
	<p><b>Plan:</b></p> <ul style="list-style-type: none"><li>• Develop a project plan outlining the key milestones, tasks, and timelines for each stage of the development process.</li><li>• Assign responsibilities to team members and allocate resources effectively.</li></ul>	
	<p><b>Execute:</b></p> <ul style="list-style-type: none"><li>• Implement the project plan, keeping track of progress and addressing any challenges or obstacles that arise.</li><li>• Regularly communicate with stakeholders to ensure alignment and transparency.</li></ul>	
	<p><b>Evaluate:</b></p> <ul style="list-style-type: none"><li>• Assess the effectiveness of your product/ app design and development process.</li><li>• Gather feedback from users, stakeholders, and team members to identify areas for improvement.</li></ul>	

# Welcome

Great products start with great ideas. Your product/ app design journal will guide you as you empathize, define, plan, prototype, and evaluate your own product/ app idea to build something you care about.



## Empathize &

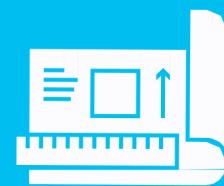
### Define

- Purpose
- Ideas
- Audience
- Focus
- Reiterate



### Plan

- User Actions Input and
- App State
- Choose Features
- Inclusion
- UI/UX



### Prototype

- Sketch Screens
- Storyboard
- Refine App Behavior
- Design Style
- Build
- App Icon and Name



### Evaluate

- App Pitch
- Prepare
- Observation
- Interview



## Empathize & Define

Purpose  
Ideas  
Audience  
Focus  
Reiterate

## Overview

Products/ Apps can be purely entertaining, and they can also help people discover new ideas, solve problems, connect with others, or create something amazing.

The brainstorming stage allows you to identify problems and come up with possible solutions. This section includes a few key topics for you to think through. Some topics have optional Go Further activities if you're interested in exploring more. Jot down as many ideas, notes and sketches that can help you design your ideas for solving a problem in your school or college.





## Empathize & Define

Purpose  
Ideas  
Audience  
Focus  
Reiterate

### Define the opportunity, problem, or challenge

Think about things that you or others experience that you might want to improve, personalize, or just make more fun.

1. Brainstorm a list of opportunities, problems, or challenges you care about.

2. Choose the most interesting idea from your list and try to explain it in just one sentence.

3. What do you know about the opportunity, problem, or challenge? What do you need to learn more about?

4. Who cares about or is affected by this opportunity, problem, or challenge?



## Empathize & Define

Purpose  
Ideas  
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Reiterate

# Similar Products/ Apps

Think about the products/ apps that you use. Identify each product's/ app's purpose and why you use it. Which do you use most, and which did you stop using after just a few times? Why did you bought/ download them in the first place? Brainstorm a list of your favorite products/ apps, and identify their purposes and the features that make them good.

Product/ App purpose:

I like this product/ app because .

Product/ App purpose:

I like this product/ app because .

Product/ App purpose:

I like this product/ app because .

Product/ App purpose:

I like this product/ app because .

Product/ App purpose:

I like this product/ app because .



## Empathize & Define

Purpose  
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### **Define the opportunity, problem or challenge**

Before you can start to explore different features/ options for your product/ app, you need to be clear on what the opportunity, problem or challenge is.

5. What questions do you need to find answers to?



## Empathize & Define

Purpose  
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Go further  
Use pen and paper to sketch out a mind map of the problems and possible solutions.

### My ideas

Brainstorm and create a list of products/ apps you'd like to build and how they'd help address the opportunity, problem, or challenge you identified. For example, they might solve or improve a specific issue, add personalization to some situation, or just be something silly. Browse the App Store for app idea / Statista, Nielsen, SurveyMonkey, Google Trends etc. for product development for inspiration. Keep adding to this list and revisit it, as some ideas might become more interesting.

My product/ app idea

	→	
--	---	--

How my product/ app will help

	→	
--	---	--

	→	
--	---	--



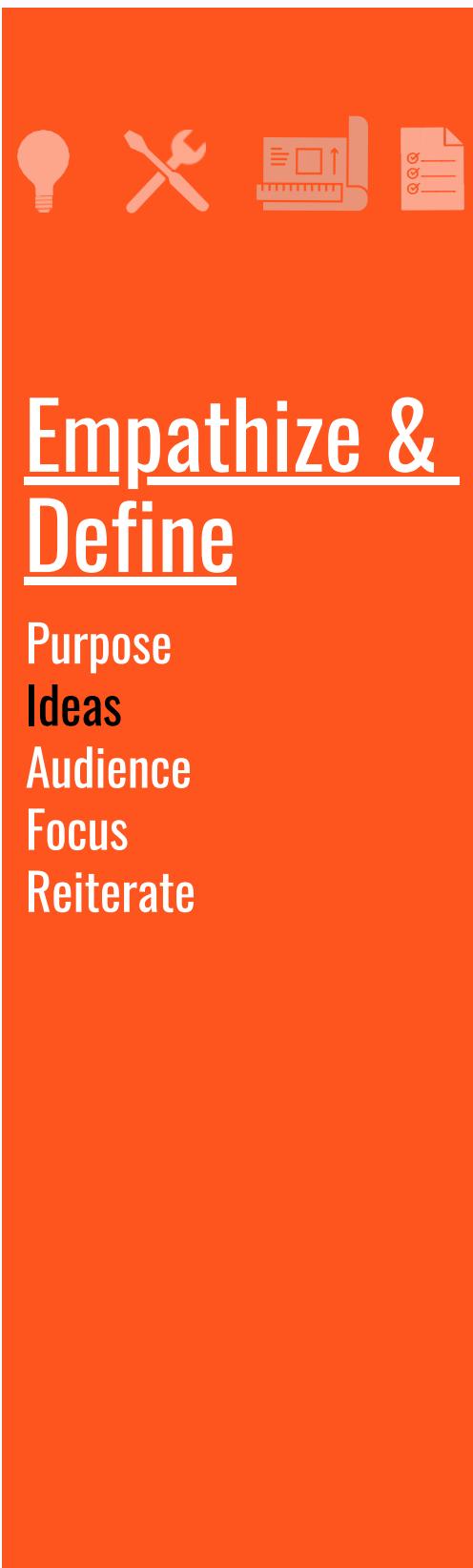
## Empathize & Define

Purpose  
Ideas  
Audience  
Focus  
Reiterate

### My ideas

Brainstorm a list of products/ apps you'd like to build. These could be new ideas, products/ apps to solve specific problems, products/ apps you think you can improve or personalize, or just something silly! Browse online for inspiration. Keep adding to this list and revisit it, as some ideas might become more or less interesting in the future.

Add your ideas.



## My product/ app idea

From your brainstorming list, select one product idea/ app idea to develop further and describe it below.

Products/ App name:

Write a description of what the products/ app does.



## Empathize & Define

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### **Pitch Among Peers**

Pitching with peers before developing a products/ app is crucial. Peers can provide valuable feedback on the products/ app concept, helping to refine and improve the idea before significant resources are invested in development. They might point out potential flaws, suggest enhancements, or offer different perspectives (can duplicate the content whenever needed)

**Feedback and Refinement:**

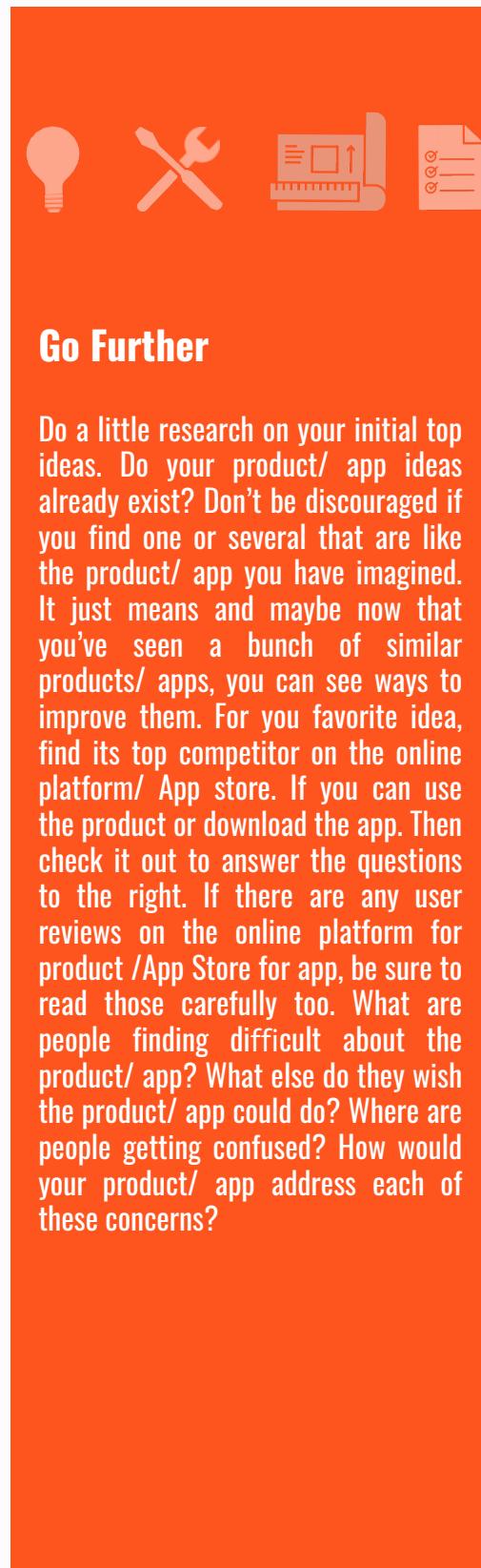
**Collaboration and Support**

**Validate the concept**

**Help in Resource Identification**

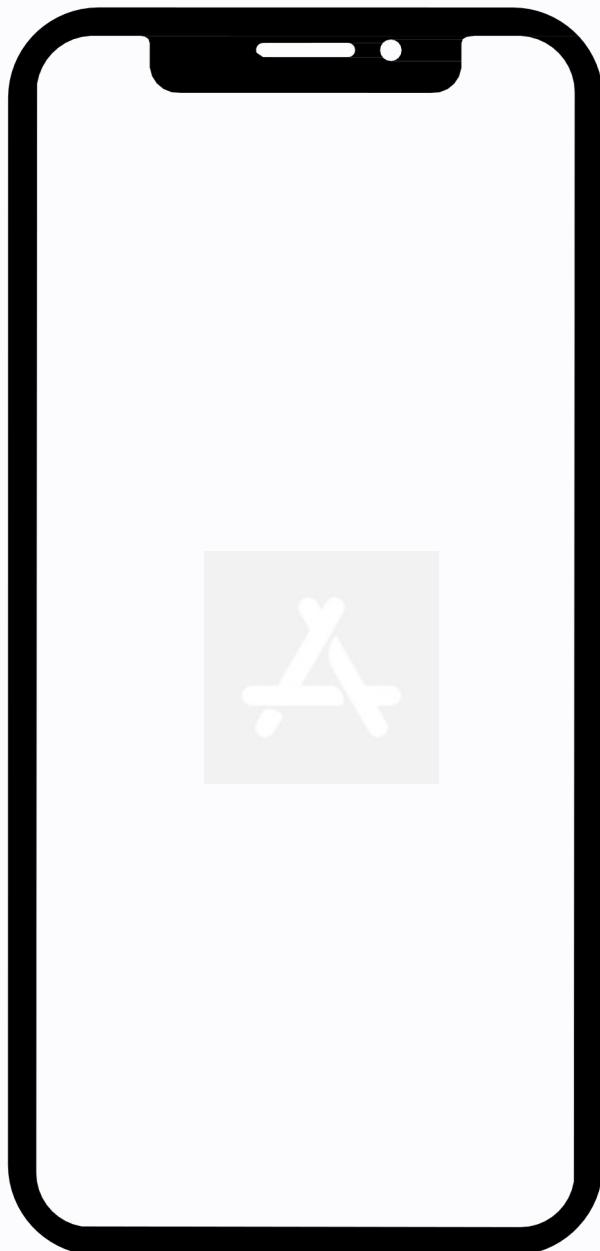
**Confidence Building**

**Networking**



**Go Further**

Do a little research on your initial top ideas. Do your product/ app ideas already exist? Don't be discouraged if you find one or several that are like the product/ app you have imagined. It just means and maybe now that you've seen a bunch of similar products/ apps, you can see ways to improve them. For your favorite idea, find its top competitor on the online platform/ App store. If you can use the product or download the app. Then check it out to answer the questions to the right. If there are any user reviews on the online platform for product /App Store for app, be sure to read those carefully too. What are people finding difficult about the product/ app? What else do they wish the product/ app could do? Where are people getting confused? How would your product/ app address each of these concerns?



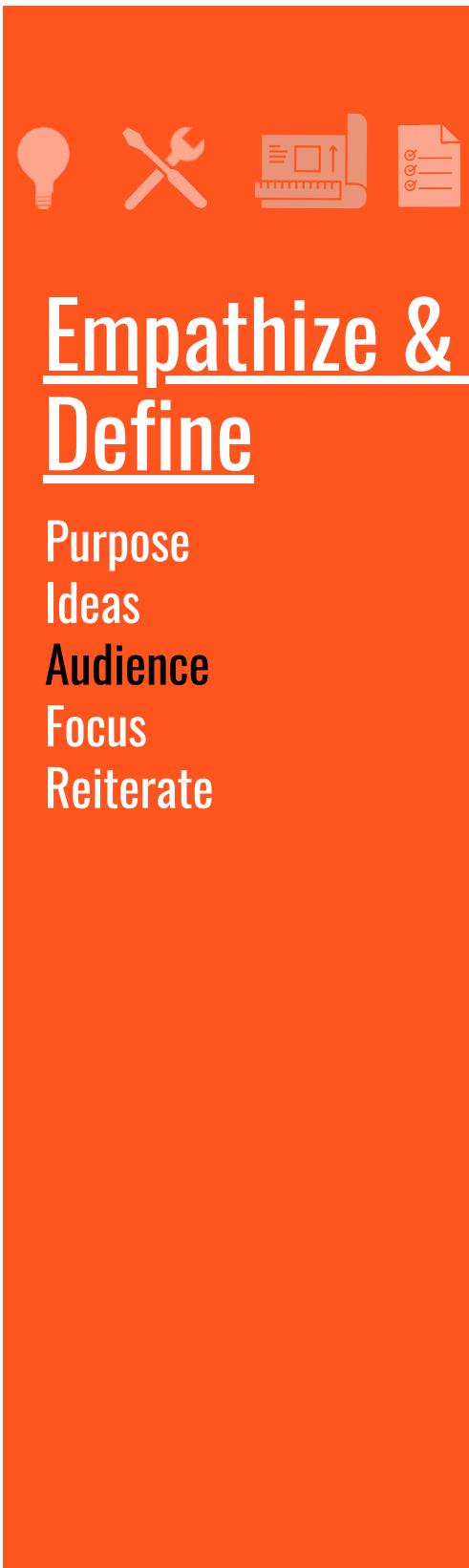
## My product's/ app's top competitor

Add example of your product's/ app's top competitor here.

Is it easy to use? Why or why not?

Can you list down the challenges while using the products/ app?

How could it be designed better?



Explore products/ apps from different categories in the marketplace/ App Store. Take a look at the icons, screenshots and descriptions. Add example images here to keep track of your research.

## Empathize & Define

Purpose  
Ideas  
Audience  
Focus  
Reiterate



5. It's important to design with a target audience. Who do you want to use your product / app?

1. It's important to design with a target audience in mind. Who do they want to use their product / app?

2. What have you learned about the audience those products / apps are meant for?

3. Did the developers do a good job communicating that?

4. Judging from the screenshots or preview video, do you think the products / apps are appropriate for their intended audiences?



## Go Further

For your products/ app idea, create a persona for each type of person who would use the product / app. Duplicate this page to outline each persona.

What does this person do?

How old is the person?

Why is the person using the product/ app?

Does the person prefer pictures or words?

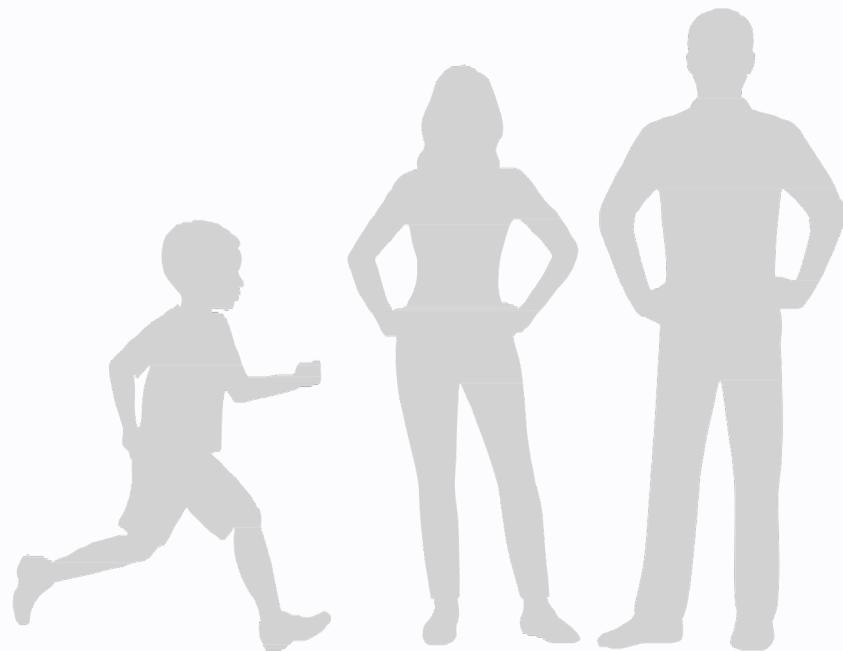
How often does the person use their product/app?

Include other details.



Illustration or stock

photo of the persona  
(optional)





## Empathize & Define

Purpose  
Ideas  
Audience  
Focus  
Reiterate

### Focus

Before you commit to your product/ app, go back and review your list of product/ app ideas. Which ones seem most interesting? Focus on a few ideas for further brainstorming. What purposes do they serve and how do they solve issues? Who are the audiences? Write products/ app statements to clearly define each product's/ app's purposes. This can help you decide whether they're good ideas or not. Compare your new ideas to your similar product / app idea. Is it still your favorite?

What will your product/ app do?

My product/ app will . . .

Why does this need exist?

because . . .

What will your product/ app do?

My product/ app will . . .

Why does this need exist?

because . . .

What will your product/ app do?

My product/ app will . . .

Why does this need exist?

because . . .



## Go Further

For your product/ app idea, create a persona for each type of person who would use the product/ app. Duplicate this page to outline each persona.

To truly understand and serve our users, we must step into their shoes, listen actively, and immerse ourselves in their experiences

Engage with a diverse group of audience to capture varied experiences:

Take detailed notes of audience interactions and feedback:

Highlight key pain points, needs, and emotions:

Stay connected with audience for continuous feedback:

Avoid yes/no questions to gather detailed insights:

Reflect on the empathy process and seek ways to enhance it:



## Empathize & Define

Purpose  
Ideas  
Audience  
Focus  
Reiterate

**Go Further**  
Search the Marketplace/ App Store for similar products/ apps. Look at user reviews to get ideas about how to make a better design or to discover features that would be nice to have.

### My product/ app idea

From your brainstorming list, select one product/ app idea and try to write a purpose statement for your product/ app using the template below.

My product/ app will help [audience] with [opportunity, problem, challenge] by [what the app will do].

Get more specific about your product/ app idea. Write down any goals for your product/ app and describe what someone would do with it.



## Empathize & Define

Purpose  
Ideas  
Audience  
Focus  
Reiterate

### Go Further

- If required, the process flow can mention detailed steps to facilitate a thorough understanding.
- If required, the process flow can mention each stage in detail to ensure comprehensive guidance.
- If required, the process flow can mention the key checkpoints and actions needed for successful completion.
- If required, the process flow can mention any contingencies or alternative steps to cover potential scenarios.
- If required, the process flow can mention additional details to support efficient implementation.

## The Process Flow

After finalizing the problem statement, the process flow serves as a critical blueprint for the development of applications, providing a clear and structured sequence of steps that ensures all aspects of the solution are systematically addressed. It helps identify key milestones, allocates responsibilities, and establishes timelines, thereby facilitating effective management. Additionally, the process flow outlines the interactions between various components, anticipates potential challenges, and incorporates feedback mechanisms, ensuring a cohesive and adaptable development process that aligns with the defined objectives and user requirements.



## Empathize & Define

Purpose  
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### Customer Sales Pitch

A customer sales pitch is a structured and persuasive communication designed to present a product or service to potential customers with the aim of convincing them to make a purchase. (can duplicate the content whenever needed)

Identifying Needs and Priorities:

Assessing Current Solutions:

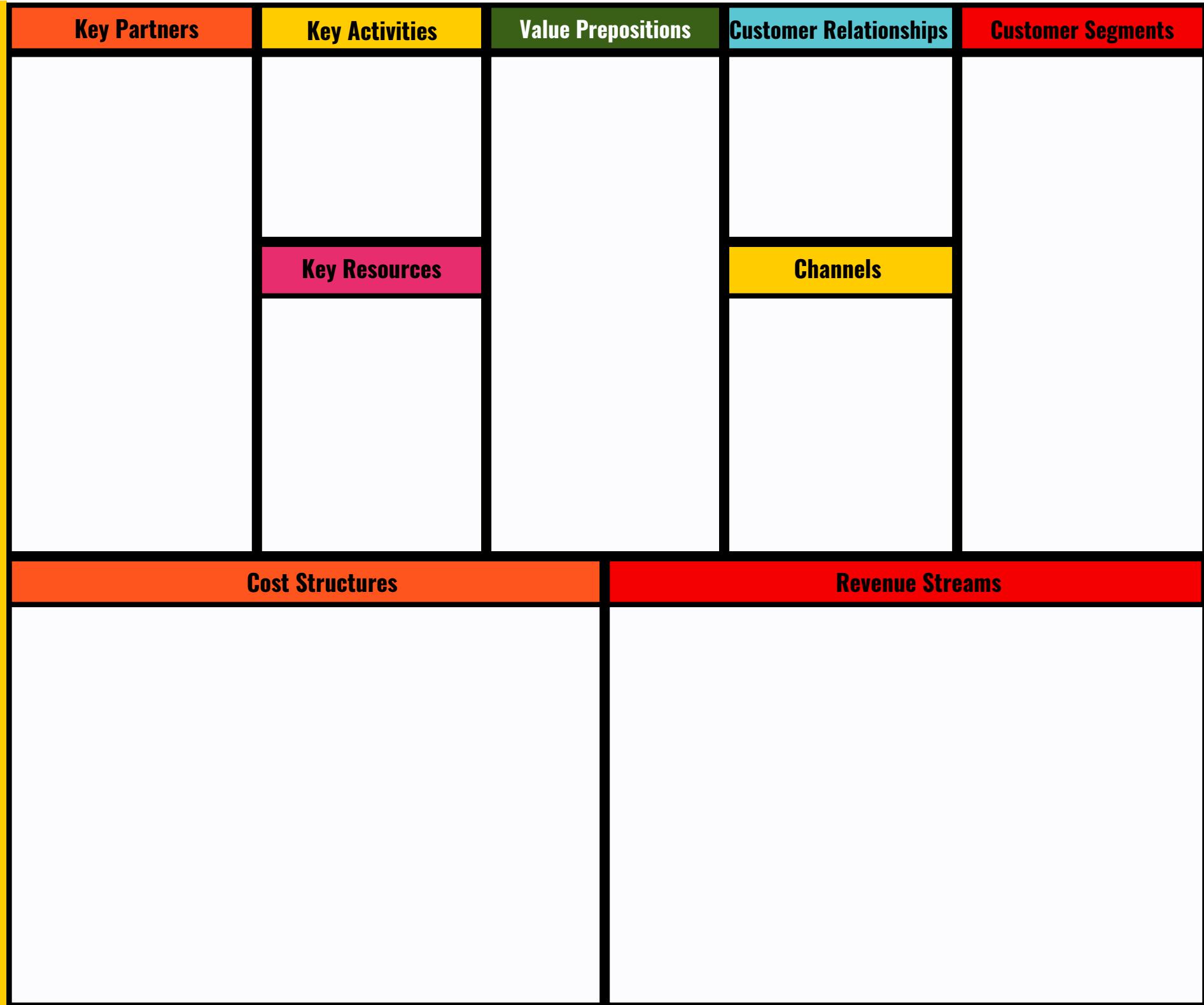
Evaluating Fit and Value:

Solution Overview:

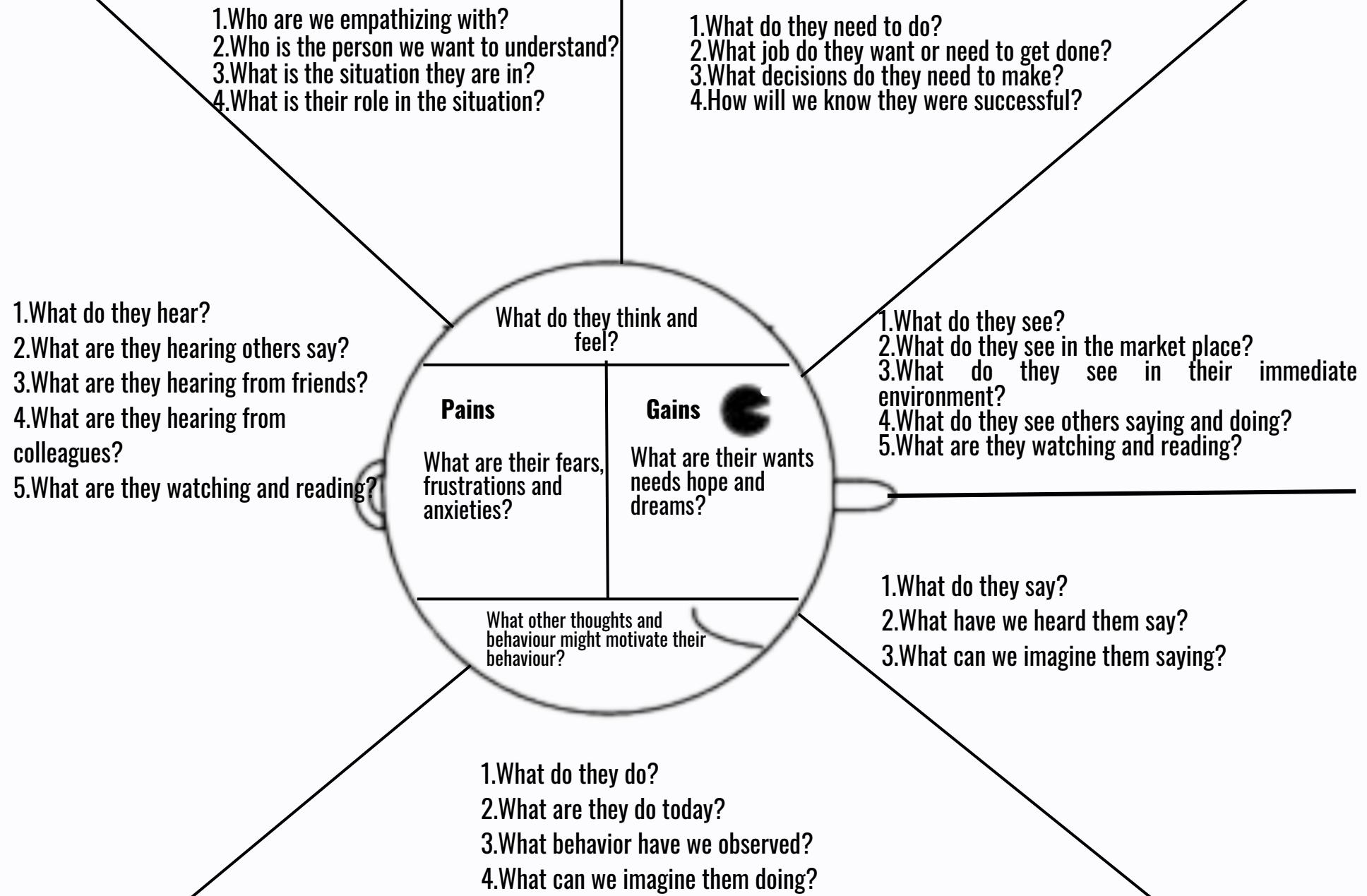
Market Fit:

Feedback and Questions:

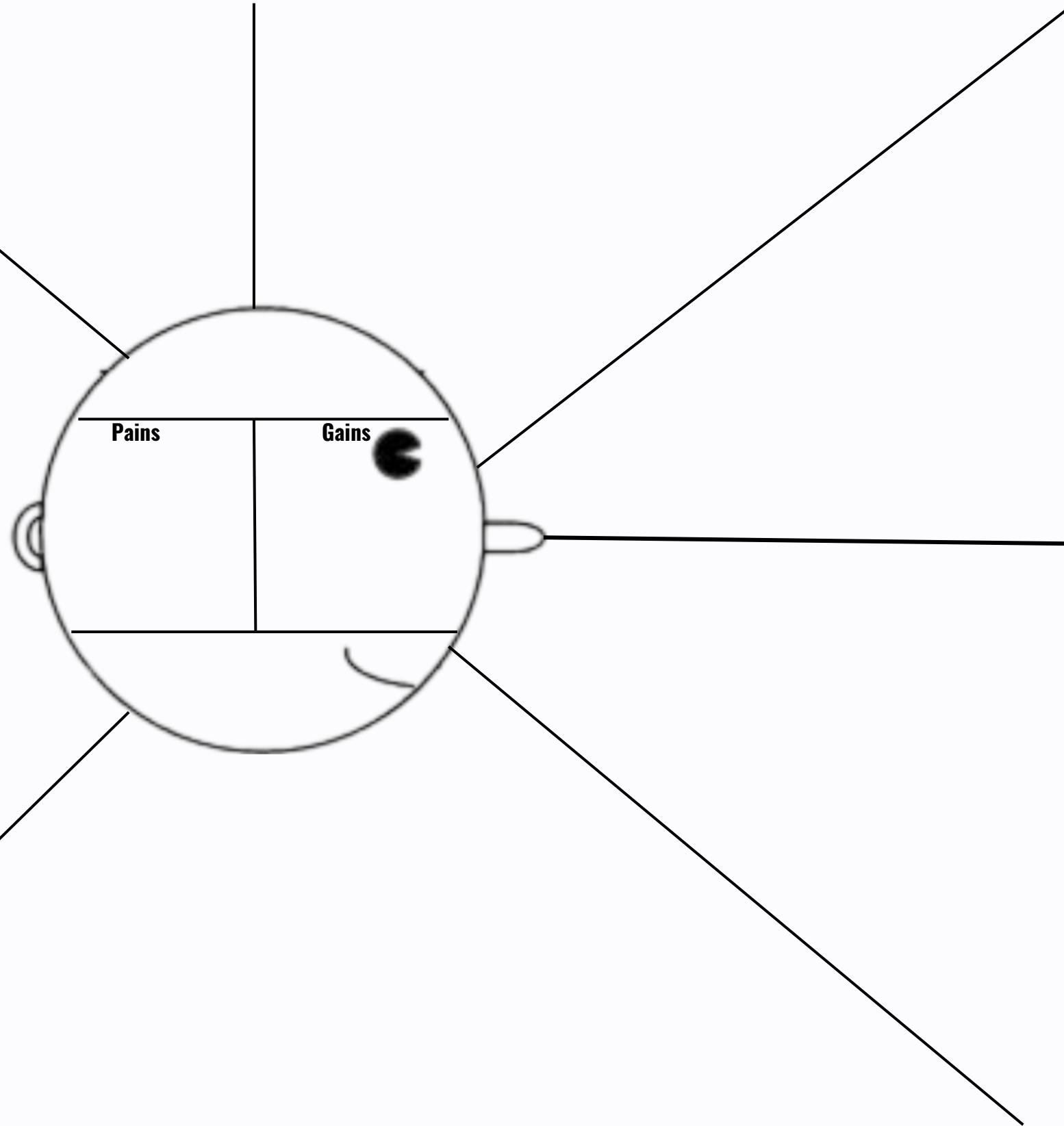
# BUSINESS MODEL CANVAS



# EMPATHY MAP



# EMPATHY MAP

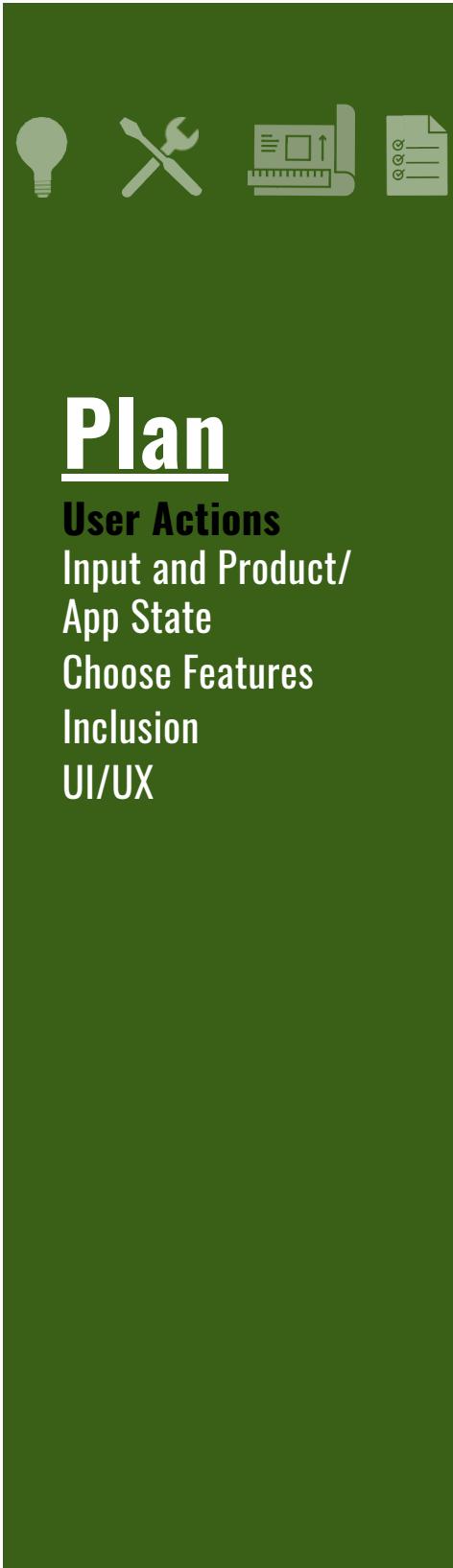




## Overview

The planning stage is when you figure out what your products/ app will actually do to achieve the purpose you outlined. You'll consider what actions a user might need and how user input could trigger something to happen in your products/ app. You'll also choose possible features and find out how to design your product/ app with inclusion in mind from the start.





## User actions in my product/ app

Based on your product/ app idea, list the different things a user will want to do in your product/ app. Add one user action in each box. Fill as many boxes as you need to for your product/ app. Some of the best products/ apps are very simple: They do only one thing, but they do that thing very well.

### Features:

A user will need to



# Plan

- User Actions
- Input and Product/  
App State
- Choose Features
- Inclusion
- UI/UX

## User input and changes to my product's/ app's state

From the list you created on the User actions slide, identify ways users will interact with your product/ app. User actions — or inputs — might trigger changes in how the product/ app looks or what the product/ app does. This is called the product/ app state: The user does something, then the product/ app does something in response. User input could include typing, tapping a screen, or moving the device. Changes to the product design might include updates to the user interface, adjustments to functionality, or enhancements to performance. This is the first step in the process of product development. Changes to the app state might include images or text appearing on the screen, calculations using input, or storage of information. This is the first step to coding your app.

### User input

Eg: A user aims the camera at a insect and taps a button

Eg: A user types the insect name into a search box

Eg: A user presses a "new insect" button on the home screen

Eg: A user takes a picture of a insect

### Changes to the app state

Eg: A photo is taken and saved

Eg: Different insect results appear on the search screen

Eg: A new screen with the camera opens

Eg: A new screen with several boxes to type information in pops up



# Plan

- User Actions
- Input and Product/ App State
- Choose Features**
- Inclusion
- UI/UX

Identify where each of the user action features would be utilized in your app/product

## My app's features

Many features are available to help you design great apps. Look through the partial list below and add checkmarks for the ones you might need for your app. Are there any others not listed that you might need?

- Drag a checkmark next to features you want to consider using in your app.
- Keyboard  
Allows typing input
- Camera  
Captures and processes images
- Microphone  
Captures and records audio
- Touchscreen  
Allows users to interact through tap, swipe, and drag
- Gyroscope  
Measures how the device is rotated
- Accelerometer  
Measures how quickly the device is moving
- GPS  
Locates the device longitude and latitude
- Bluetooth  
Communicates wirelessly with other devices
- Map  
Displays interactive maps
- Augmented reality  
Places virtual objects that users can interact with in their world
- Speakers  
Plays back audio
- Haptics  
Provides feedback through vibrating the device (iPhone only)
- Machine learning  
Analyzes information and categorizes it for further use
- Other
- Other
- Other



# Plan

User Actions  
Input and Product/ App State  
Choose Features  
**Inclusion**  
UI/UX

## Inclusive design in my product/ app

An inclusive product/ app is respectful in that it puts people first. It does this by presenting information and functioning in ways that everyone can access and understand. This is a process that you can continue to improve as you prototype and get user feedback.

Try to think about your product/ app through different perspectives. How will your product/ app support a wide variety of users?

Consider how to make your product/ app approachable and welcoming to all. What will you need to do so that users can fully access the [accessibility features](#) in your product/ app?



Drag a checkmark next to elements that you need to consider for your product/ app.



### Cognitive Support

Use motion, fonts, color, and sound carefully to avoid sensory overload and to help people — including those with learning challenges — focus on what's important.



### Accessibility Descriptions

Include alternative text for visual elements and accurately label buttons to provide context for people who are blind, have low vision, or use a screen reader.



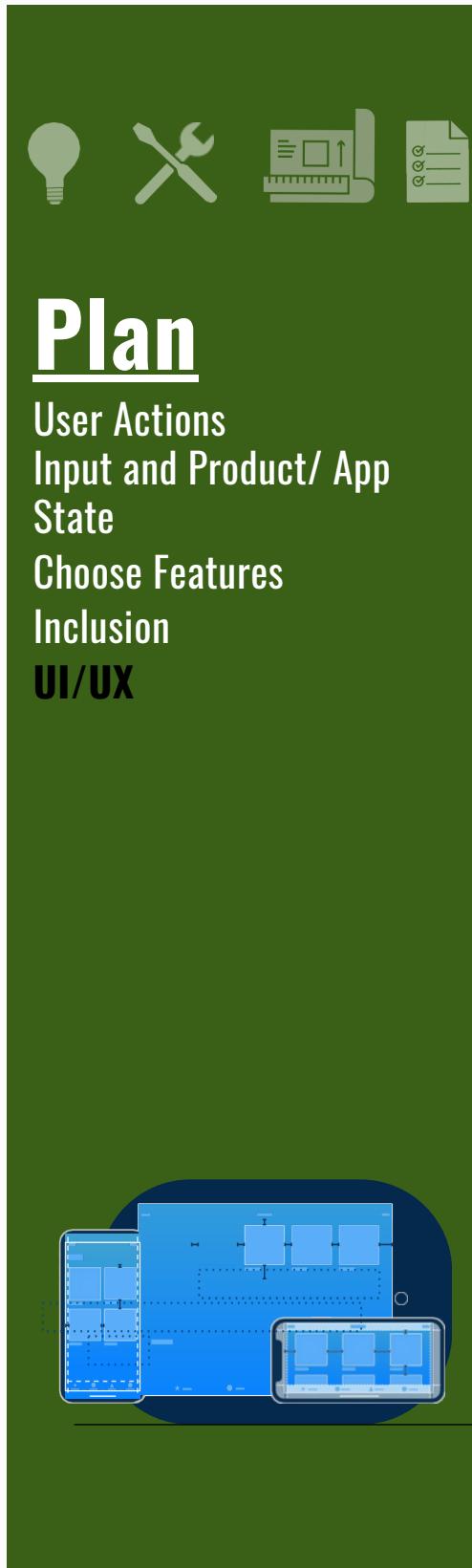
### Accessible Content

Add captions, transcripts, or sign language support for video or audio elements and haptic alerts for people who have hearing loss or want a silent device.



### Alternate Input

Provide multiple ways to complete gesture-based (like swiping) or typing actions that can support someone with limited mobility.



## UI/UX

A good product/ app should be easy to use. That's where the user interface (UI) design comes in. A well-designed UI makes for a good user experience (UX). Think back to the first time you used some of your products/ apps, or try using a new product/ app. What was the experience like? Did you get confused navigating them? Review elements such as material quality, ergonomic design, and the overall user interaction with the product. Even the smallest detail can significantly impact how someone experiences your product. Review elements like font size, icon shape and placement, and the navigation from screen to screen in app. Even the smallest element makes a difference in how someone experiences your product/ app. Be sure to review in [Android Design Guidelines- https://developer.android.com/design/](https://developer.android.com/design/)

Go back to your list of similar products/ apps and choose one to review. Think about the features that make it easy to use.

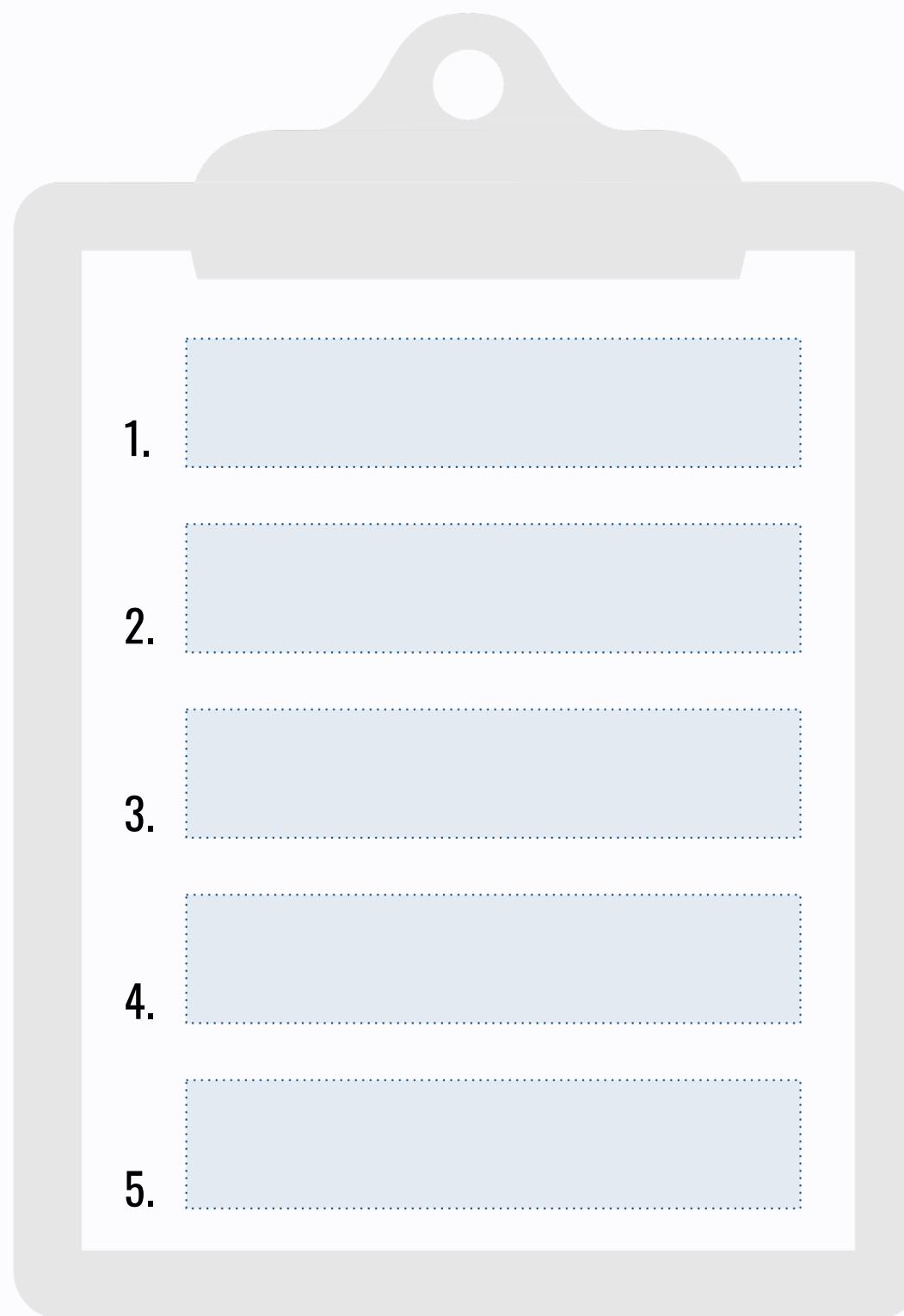


Review of similar product/ app

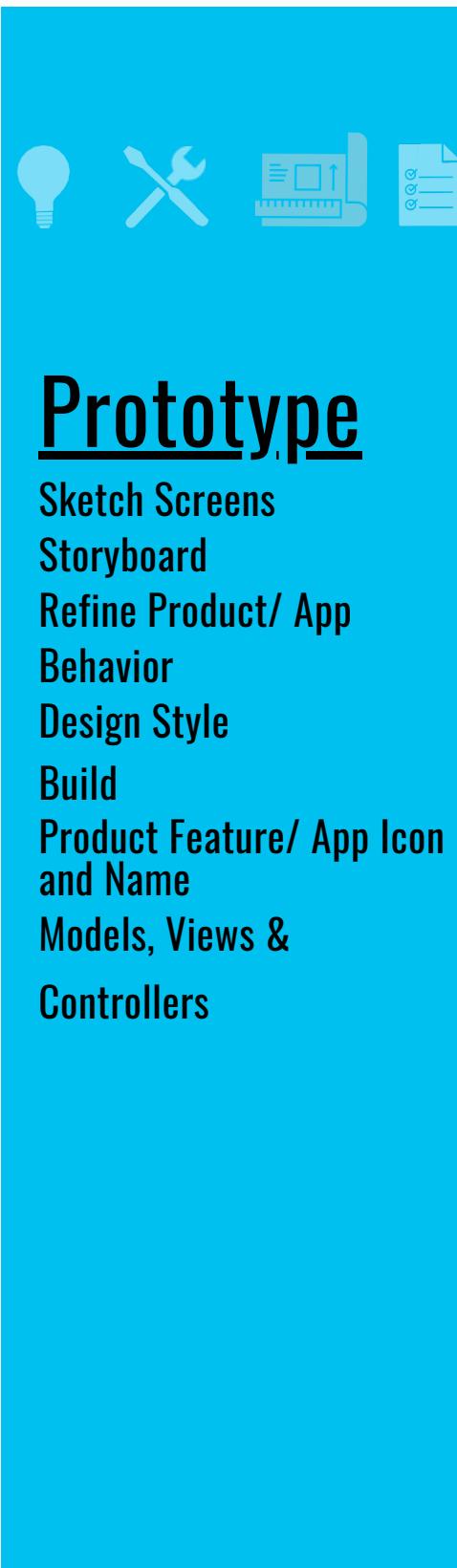


### Go Further

Now consider the rest of the list of your similar product/ apps. Rank them in terms of their UI design. Which products/ apps are easy to use and seem to just work? Write down the reasons that some products/ apps are easier to use than others. Did you know what to do immediately? How many steps did it take to start using the product effectively? How many taps did it take to get going on the app? (The answer should be 'very few'.) First impressions count. Compare your notes with other students. Did you agree on the reasons?

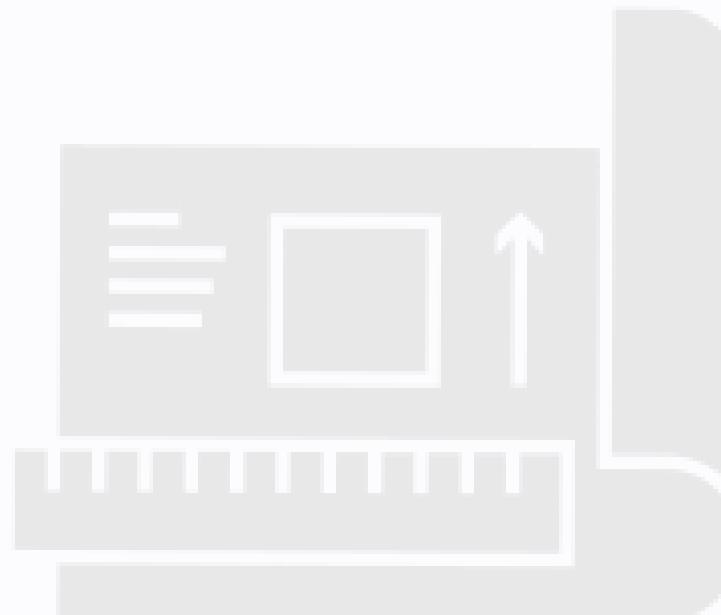


- 1.
- 2.
- 3.
- 4.
- 5.



## Overview

Building a prototype helps you figure out exactly how your product/ app will work and what the user experience will be. This section will guide you through the process of sketching out what a user will see and do in your product/ app and creating a unique style for it. You'll then build a Designing for product development or working prototype in UI/UX Tools (Figma for app development) so that you can test out your ideas before doing any coding for app development.





# Prototype

## Sketch Screens

Storyboard

Refine App Behavior

Design Style

Build

Product Feature/ App Icon and Name

Models, Views &

Controllers

## My product flow chart/ app's screens

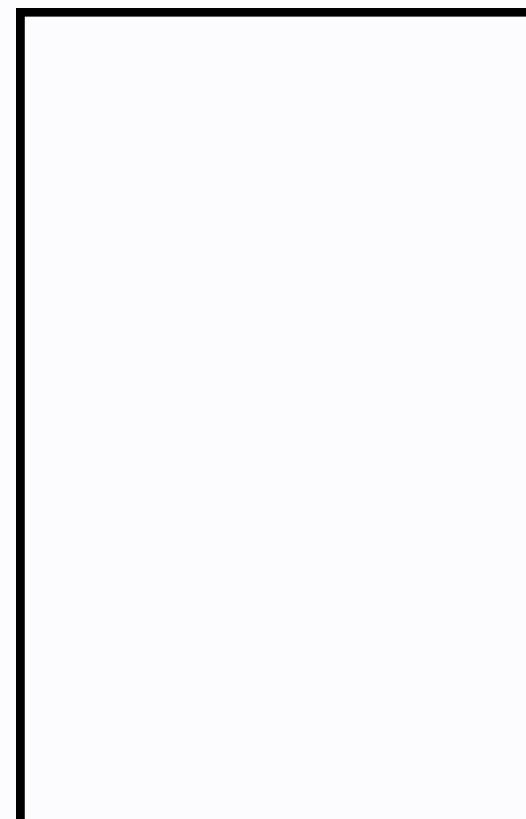
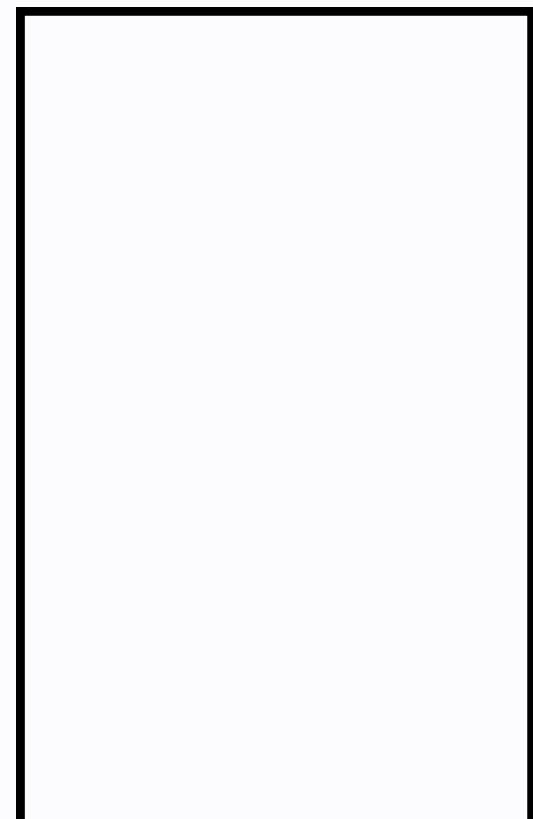
Choose one user activity to prototype from the list you created on the User Actions slide.

Describe the user activity in more depth.

eg: for product development- A user will evaluate a new kitchen gadget they've received. First, they'll assemble the gadget and test its functionality to see if it meets their needs. Once satisfied with the performance, the user can record feedback and suggestions for improvements. They can also add details about how and where they used the gadget, and any issues they encountered during its use.

eg: for app development- A user will choose to take a photo of a new insect they found. Then they'll take a photo and decide if they like it or want to retake it. Once they like the photo, the user can save it and add information about the insect. They can add the type of insect and where it was found.

Use pen and paper or a drawing app to sketch between one and three screens that show the user activity you chose. Quickly test ideas by sketching ideas and layouts (one by one ideas). Take photos of each phase/ screen you sketched.



# Prototype

**Sketch Screens**

**Storyboard**

Refine App Behavior

Design Style

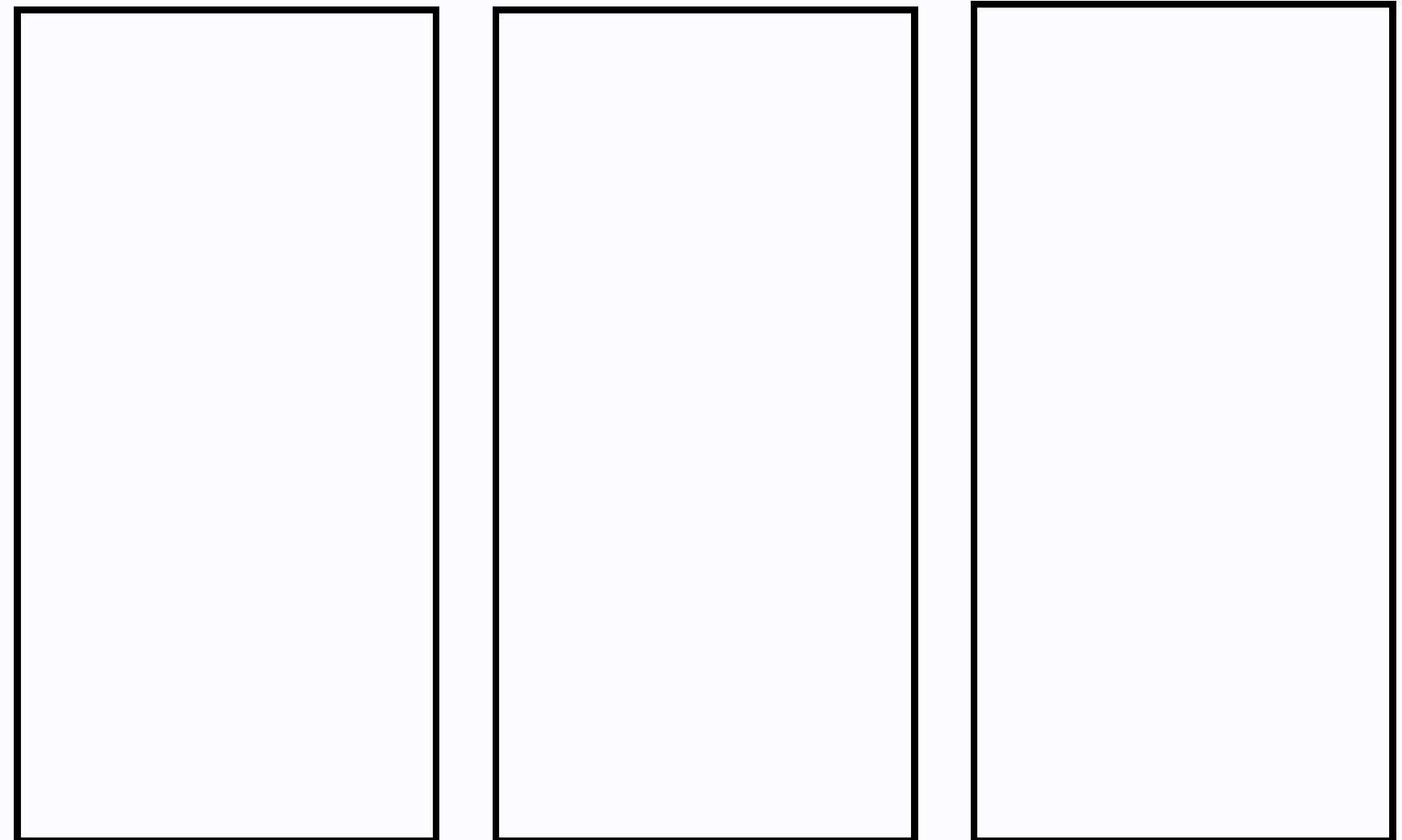
Build

Product Feature/ App Icon and Name

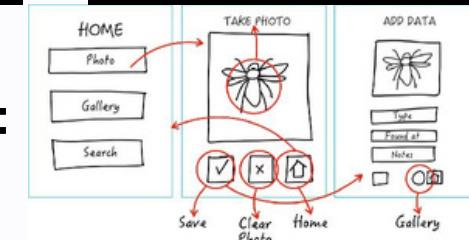
Models, Views & Controllers

## My product's/ app's storyboard

Copy and paste your product/ app sketches from the Sketch Screens slide, then draw arrows to show the interactions between product components/ interactions between screens. Refer to your ideas on the Input and product/ App State slide to remind yourself how your product's/ app's look or function will change with user actions, such as "activating a new feature" or "initiating a new function"/ "triggering a new screen".



eg:



## Example



# Prototype

Sketch Screens

Storyboard

**Refine App Behavior**

Design Style

Build

Product Feature/ App Icon and Name

Models, Views &

Controllers

## My product's response to a user

There are two main categories of how the product state can change with user input:

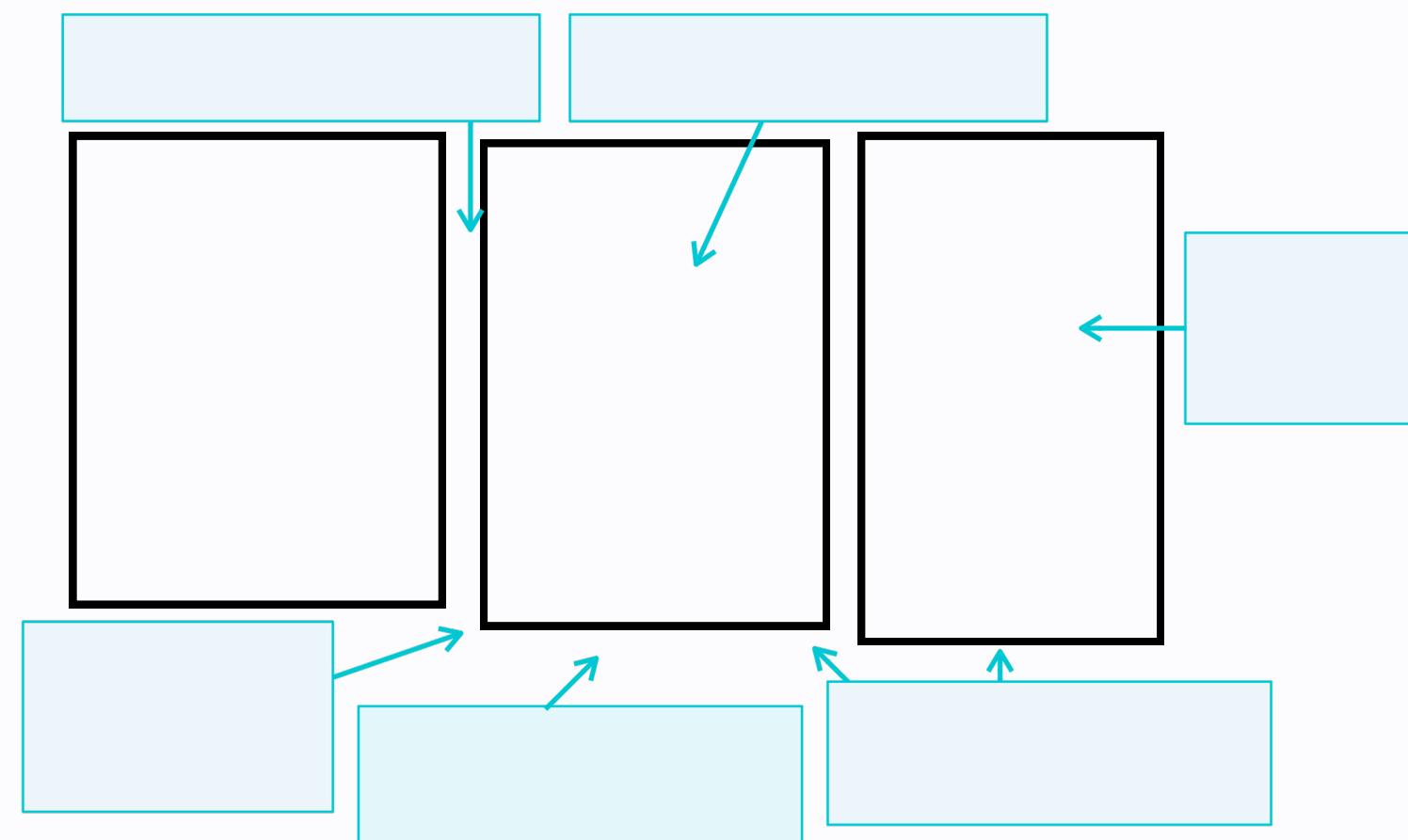
Physical Interaction:

Changes to the physical state, such as a part moving, a button being pressed, or a mechanism being activated.

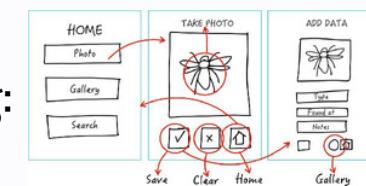
Performance Output:

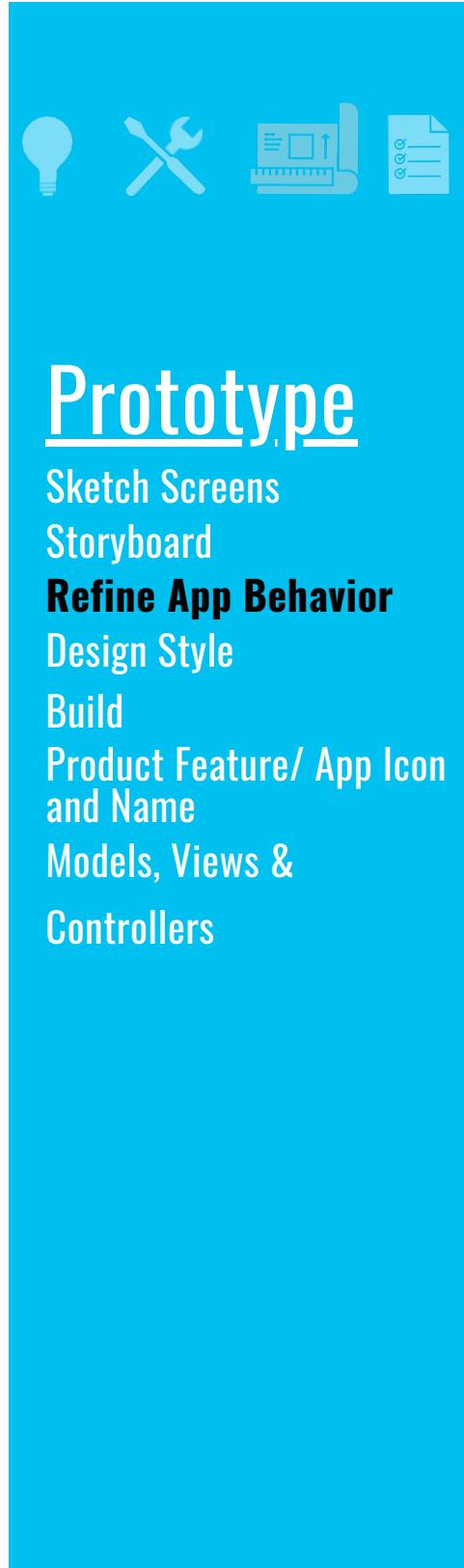
Changes in the product's function, such as an improvement in efficiency, activation of a feature, or recording of user data.

Take a screenshot or diagram of the product layout or design blueprint and add it to this slide. Drag a box that corresponds to the type of change in the product state down to each user interaction in your blueprint. Draw lines to connect each user interaction to the box and write a short description of the change in the product state.



eg:





# Prototype

# Sketch Screens

# Storyboard

# Refine App Behavior

# Design Style

# Build

## Product Feature/ App Icon and Name

Models, Views &

## Controllers

# My app's response to a user

**There are two main categories of how the app state can change with user input:**

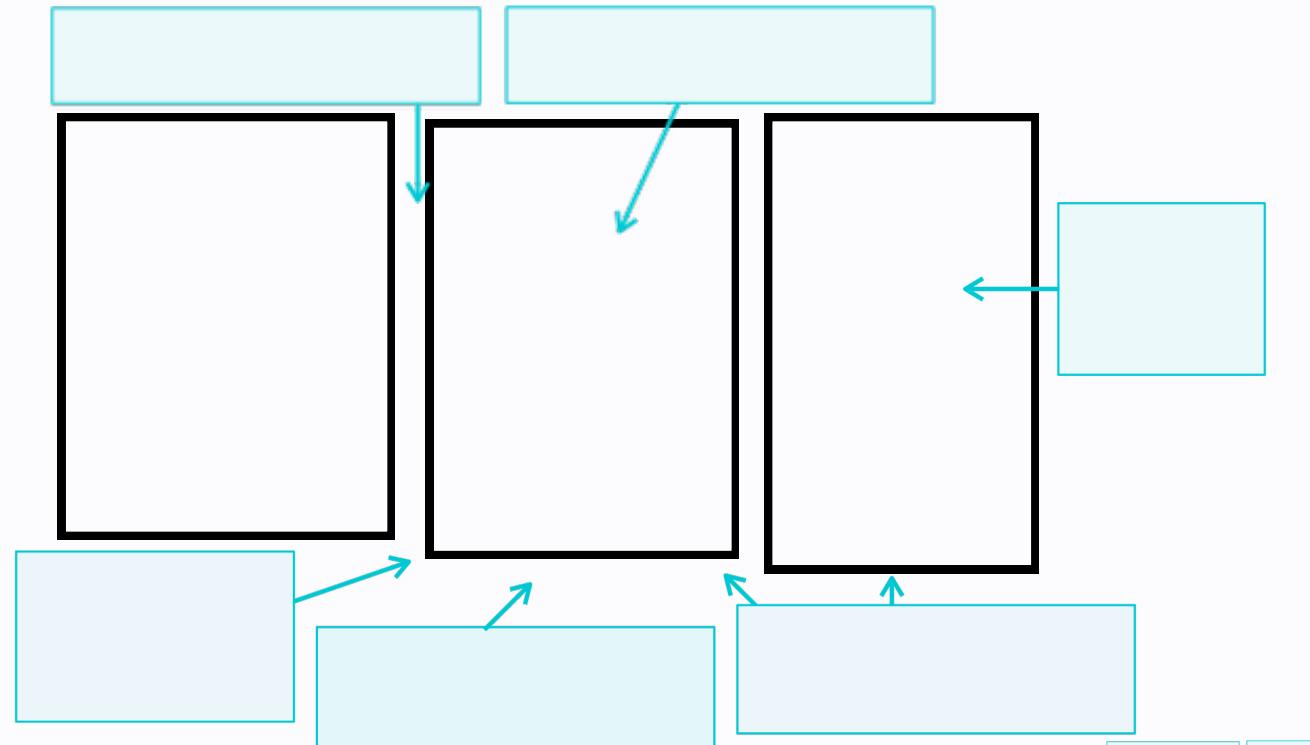
## Onscreen:

Changes to the interface, such as a new screen, button, or text that appears.

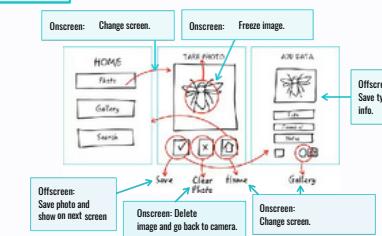
## Offscreen:

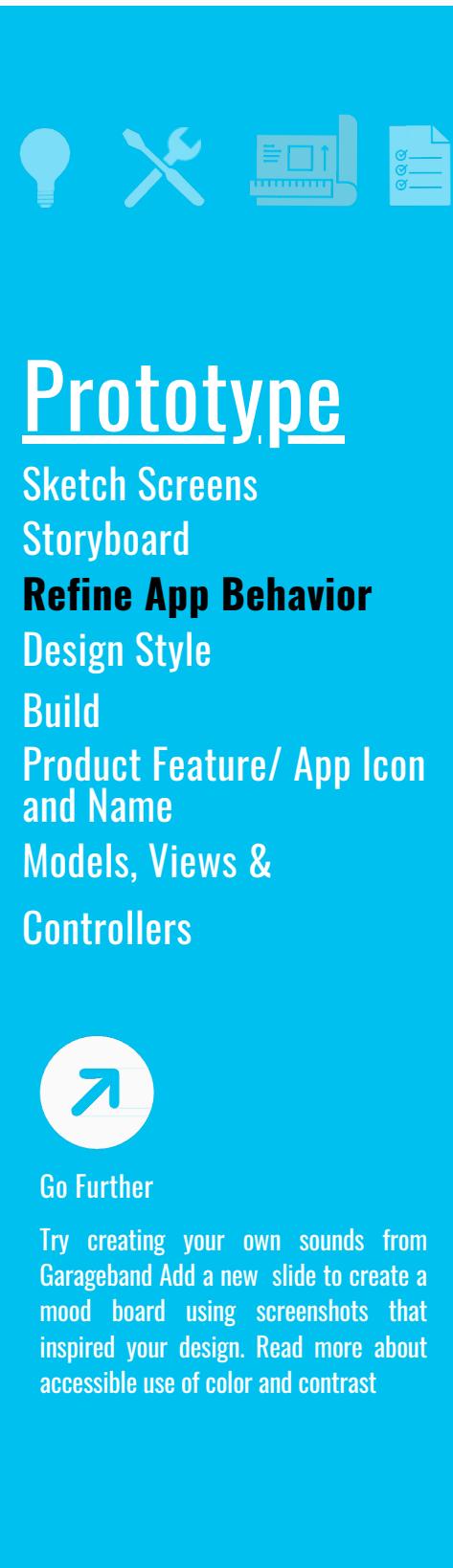
Changes to information behind the scenes, such as a calculation, saved user input, or a photo filter.

Take a screenshot of the outline for your app and add it to this slide. Drag a box that corresponds to the type of change in the app state down to each user input in your storyboard. Draw lines to connect each user input to the box and write a short description of the change in the app state.



eg





**Prototype**

- Sketch Screens
- Storyboard
- Refine App Behavior**
- Design Style
- Build
- Product Feature/ App Icon and Name
- Models, Views & Controllers

**Go Further**

Try creating your own sounds from Garageband Add a new slide to create a mood board using screenshots that inspired your design. Read more about accessible use of color and contrast

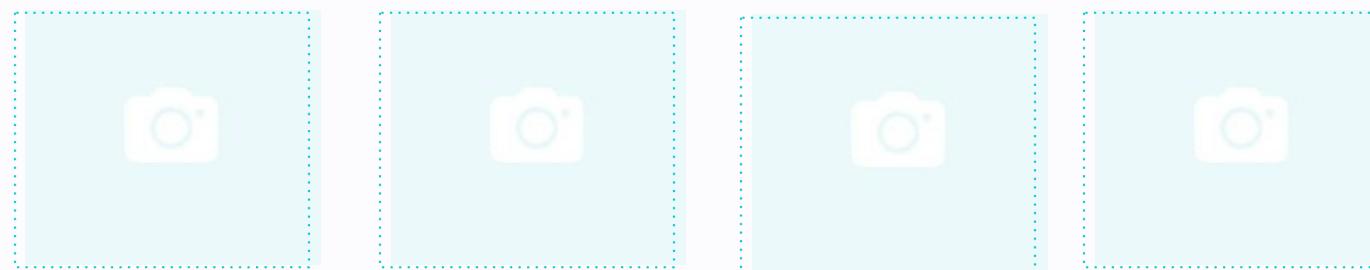
## My product's/ app's design

Give your product/ app some style and personality. Remember to keep your product's/ app's purpose and audience in mind, and think about how your design choices can make your product/ app inclusive and accessible to your users.

Choose a color scheme.



Sketch details of user interface (UI) elements such as buttons, navigation tools, or other visuals. If your product/ app uses color to show information, sketch features/ icons to support colorblind users, too. Then take pictures and add them below.



For each visual UI element, practice writing alternative descriptions for a person who's blind by selecting the image, clicking or tapping the Image tab in the Format sidebar, and adding text to the Description field.

What fonts will your app use?



Add sound files or describe the sounds your app will use to notify users of something, immerse them in a game atmosphere, or enhance the app's mood.



**Example**

**My product's/ app's design**

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What fonts will your app use?

What features will your product have?

Add sound files or describe the sounds your app will use to notify users of something, immerse them in a game atmosphere, or enhance the app's mood.

No audio files are needed.

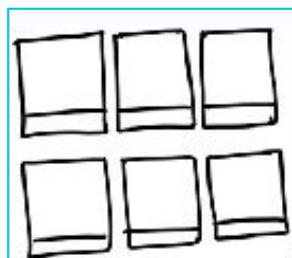
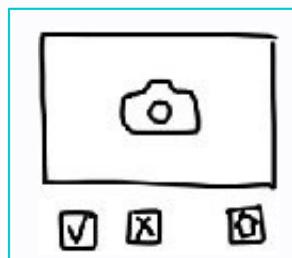
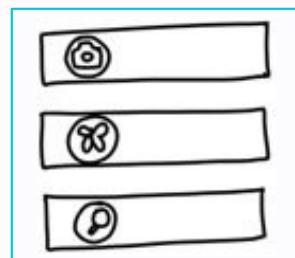
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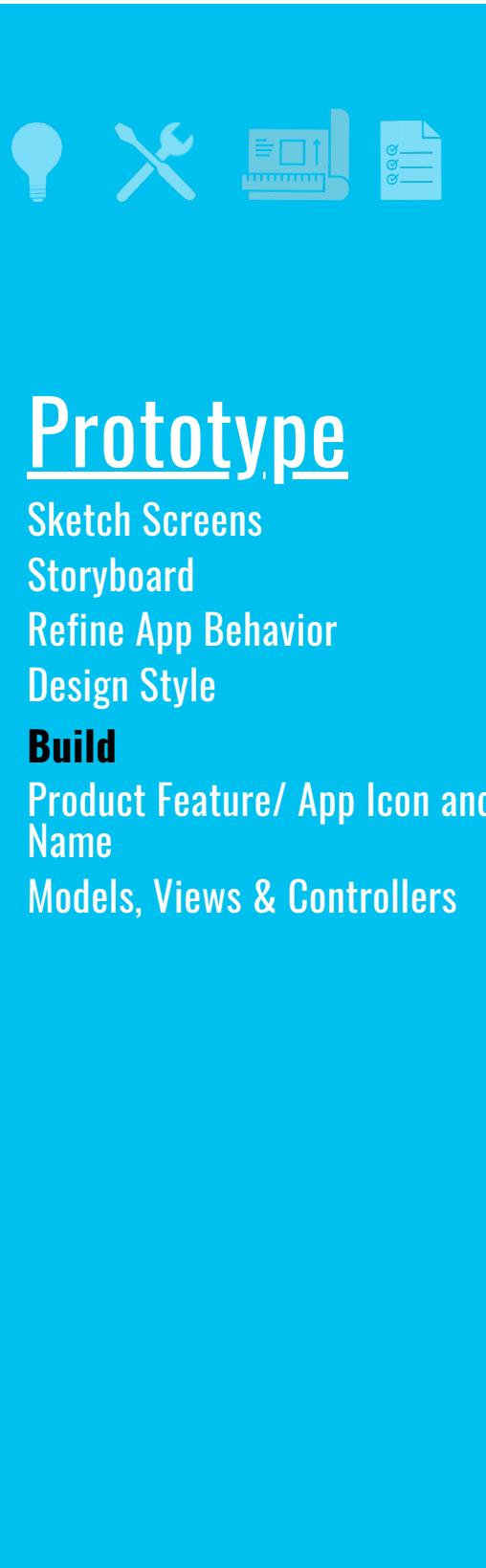
What fonts will your app use?

Phosphate and Lucida Sans

What features will your product have?

Add sound files or describe the sounds your app will use to notify users of something, immerse them in a game atmosphere, or enhance the app's mood.

No audio files are needed.



Example on next slide >

## My product/ app prototype in UI/UX Tool.

Create a new project. Download the template. Use the ideas from your sketches and design elements to create screens in your UI/UX Tool prototype. Build each screen on a different slide.

Make interactive links to mimic product/ app behavior. For product development- use your notes from the Product Development Strategy slide to establish connections between different sections of the document. This will enable you to navigate between various stages of development and trigger updates or responses as you would with integrated features in a product.

For app development- use your notes from the Refine App Behavior slide to add links between the slides so that you can navigate between screens and trigger responses as you would with code. To do this, select the object or text you want to link, select the option to add a link, then choose the appropriate slide. To make sure that the slides change only when the user taps the buttons, check that Presentation Type is set to Links Only in the Document sidebar.



## Example of a Chair Prototype

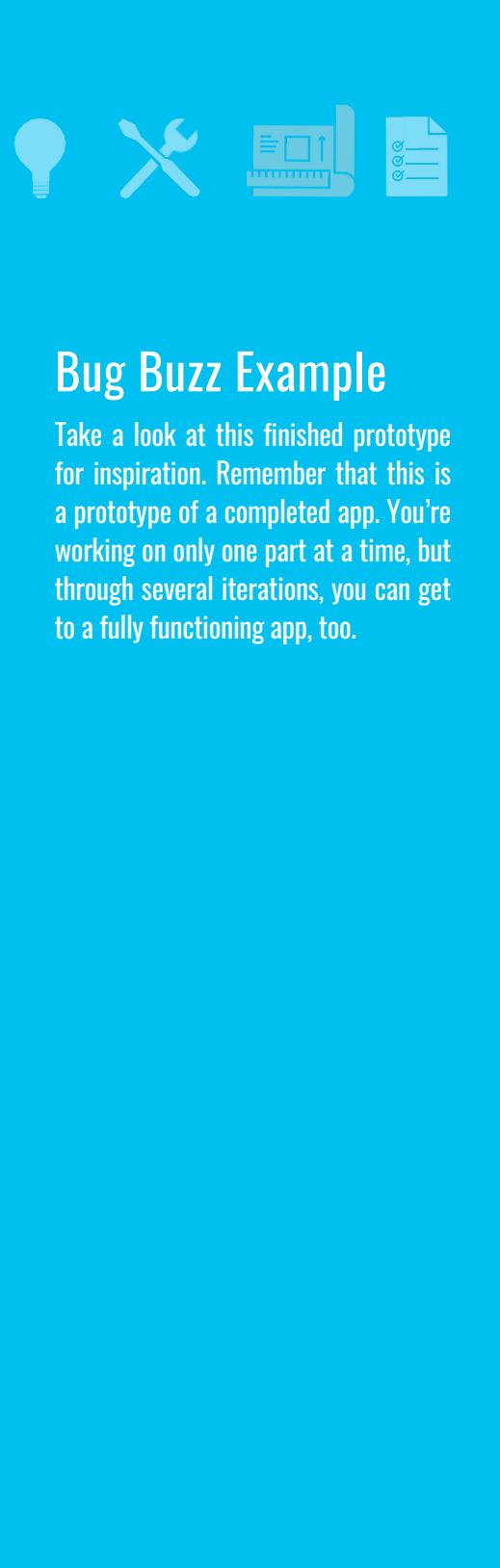
Take a look at this finished prototype for inspiration. Remember that this is a prototype of a completed product. You're working on only one part at a time, but through several iterations, you can get to a fully functioning product too.

Example



### Example of Product prototype





**Bug Buzz Example**

Take a look at this finished prototype for inspiration. Remember that this is a prototype of a completed app. You're working on only one part at a time, but through several iterations, you can get to a fully functioning app, too.



## Example app prototype



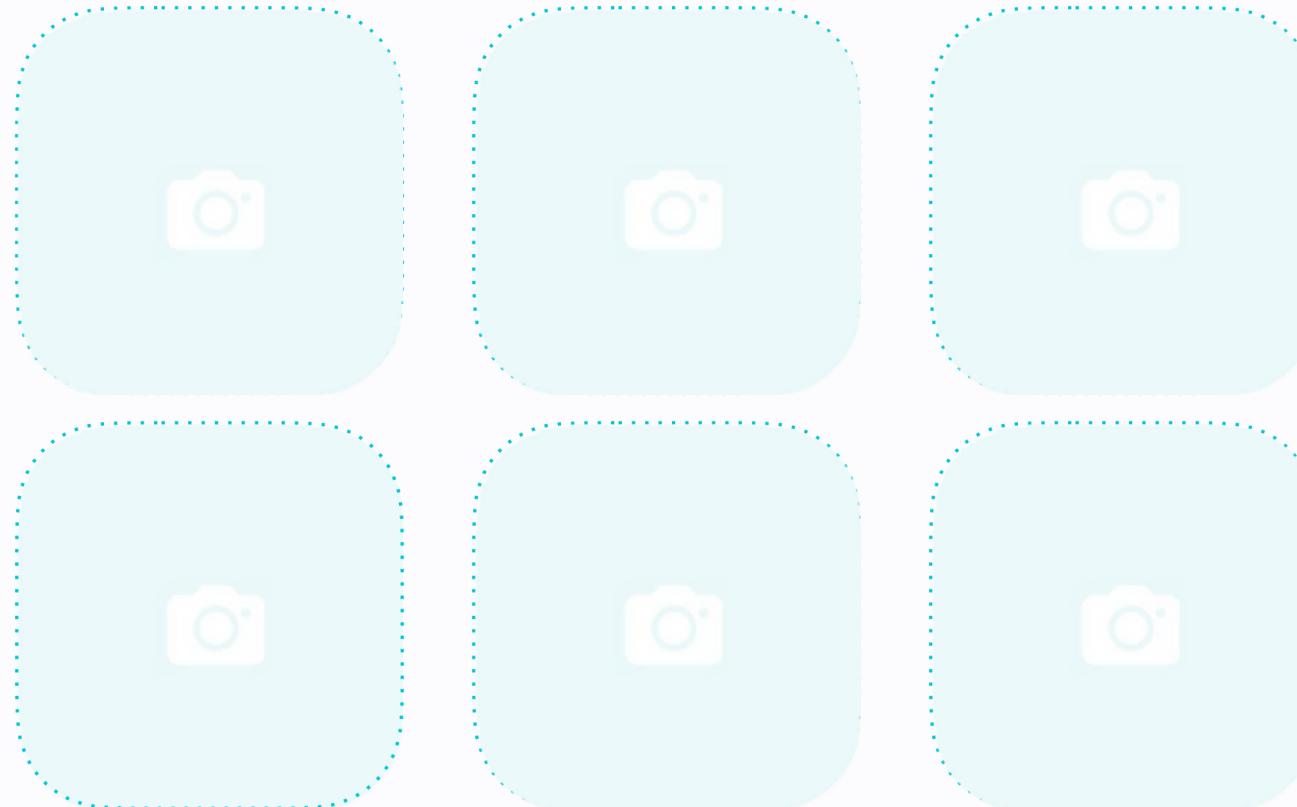


# Prototype

Sketch Screens  
Storyboard  
Refine App Behavior  
Design Style  
Build  
**Product Feature/ App Icon and Name**  
Models, Views & Controllers

## My product's features and name/ My app's icon and name

Use pen and paper or a drawing app to sketch a few features/ icons for your product/ app. Add them here and put your top choice first.



Come up with a few different names for your product/ app. Put your top choice first.




## Prototyping in UI/UX Tools

1. Set Up Your Document- Create a new project and set the canvas size to match your target device or screen.

2. Design Elements-Choose colors and fonts. Design navigation buttons and other UI elements.

3. Create Screens-Design each screen on a separate artboard or frame.

4. Add Interactions-Use the tool's prototyping features to create links between different screens.

5. Set Transition Effects-Choose transition types and configure animation settings.

6. Test Your Prototype-Enter the presentation or preview mode to test interactions and transitions.

7. Share Your Prototype-Share a link to your prototype with stakeholders for feedback.

8. Iterate and Refine-Gather feedback and make necessary adjustments.

As you refine your product, consider aligning your design with current industry standards and best practices. This will ensure that your product not only meets user expectations but also adheres to proven design principles that enhance functionality and user experience

As you experiment with your own UI, you might also want to design apps that match the iOS/android design language.

For each version of your prototype, think about the following:

### For Product



- Can users choose to interact with the product in different ways?
- Can you present the same information in different formats?
- What's the first experience (view) users encounter with the product? What features or controls are immediately visible? What follows after?
- How many interactions will it take for users to access essential information or features?
- How will users move between different parts or features of the product?
- What are some effective ways to convey the product's features without relying on text?

### For App

- Can users choose to engage with the content in different ways?
- Can you provide different representations of the same data?
- What's the first screen (view) that the user sees? Which buttons are visible? Then what happens?
- Decide what kinds of graphics and icons your app will display and where they'll appear.
- How many taps will it take for users to find out what they need to know?
- How will users navigate between views?
- What are some simple ways to communicate the features of your app without using words?



# Prototype

Sketch Screens

Storyboard

Refine App Behavior

Design Style

Build

Product Feature/ App Icon  
and Name

**Models, Views &  
Controllers**

## Deeper Dive: Detailing MVC

Once you've defined how your app will flow in your prototype, think about how to organise different parts of your code. The MVC pattern helps accomplish this while keeping your code organised.

**App Development:** Use the following questions to help build a list of models, views and controllers that your app would need if you began building the prototype with code.

### Models

What data do you need to build your features? Where does the data come from? Does the user supply it or does it come from a web service? Do you need to store the data on the device for offline access?

### Views

Are there particular views you want to show on multiple screens? Did you include any customised gestures?

### Controllers

How many view controllers does your app need? What controllers will help manage the data? Does your app have customised transitions that need a controller?



# Prototype

Sketch Screens  
Storyboard  
Refine App Behavior  
Design Style  
Build  
App Icon and Name  
**Models, Views & Controllers**

What sections of your app might you want to write code for first? Outline a plan for building your app. Look back at your storyboard.

Which views are most important and need to work first?

Which views might you want to save to build at the end?



## Pitch with Mentors/ Industry/ Alumni/ SNS 15/ CFs

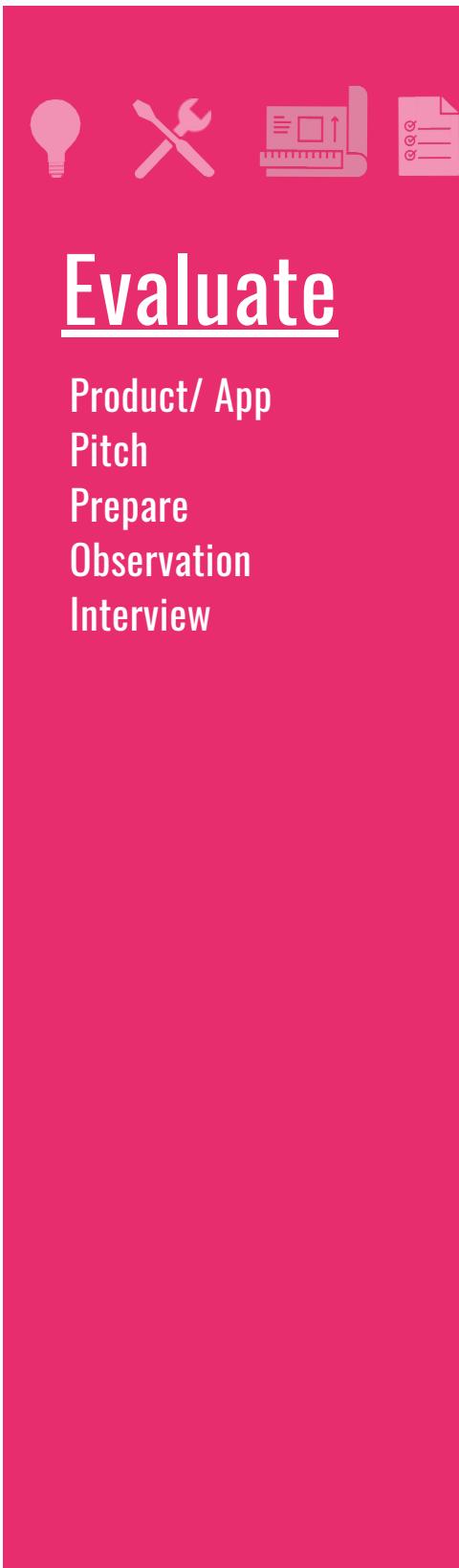
### Pitch with Mentors/ Industry/ Alumni/ SNS 15/ CFs:

When pitching your product/ app development idea to mentors, industry professionals, or alumni, it's important to approach it with a strategic and professional mindset. Here's a guide to help you prepare and deliver an effective pitch

- Research and Preparation- Know Your Audience, Prepare Your Pitch Deck & Practice Your Delivery
- Problem Statement- State the Purpose, Define the Problem & Highlight the Impact
- Solution Overview- Present Your Product/ App, Showcase Value, Execution Plan & Explain the Business Model
- Feedback and Next Steps- Be Concise and Focused, Ask for Feedback & Discuss Next Steps

Refine the product/ app as needed to ensure it meets the highest standards and addresses user needs effectively.

**Brand the impact with story in LinkedIn/yTube followed by preparing a Case Booklet-** It is a comprehensive document that outlines the rationale, planning, and execution details. It serves as a reference guide and a strategic tool throughout the development process. A case booklet helps ensure that all aspects of the product/ app development are thoroughly planned and documented, serving as a roadmap for the project and a reference for stakeholders.



## Overview

All right, you have a working prototype! Now it's time to get some feedback. Though you have only a partial product/ app, it's good to test often. Have your classmates, family, and others try it. Try to find testers who fit your product's/ app's target audience and pitch them your product/ app. Then plan to observe users as they try the prototype and get their feedback.





# Evaluate

**App Pitch**  
Prepare  
Observation  
Interview

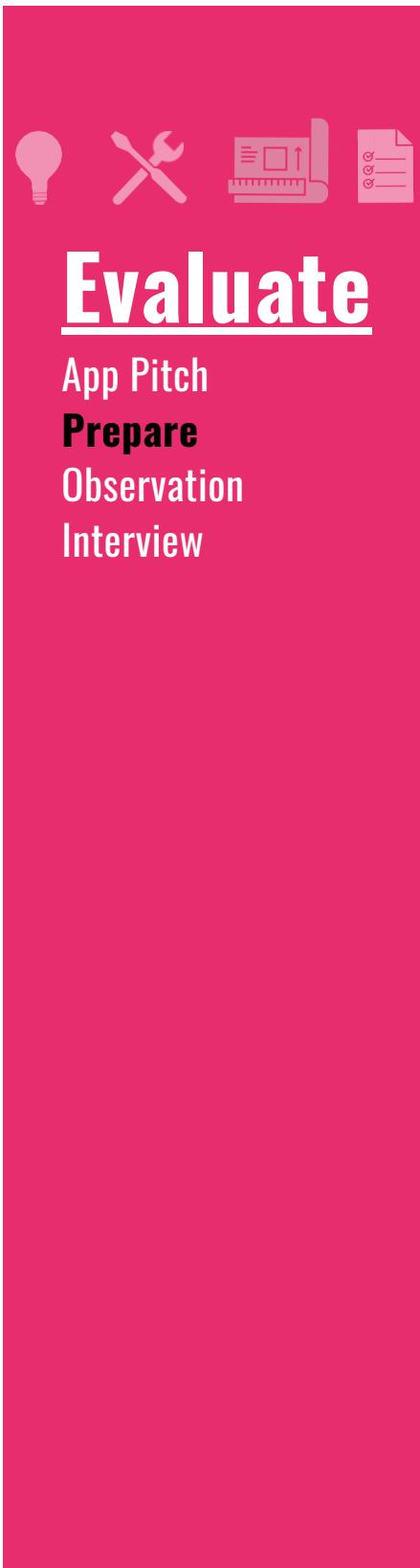
## My product/ app pitch

One way to test your product/ app idea is to develop a pitch and share it with others. Make a three-minute presentation or video of your pitch. A good pitch will tell a strong and clear story that makes people want your product/ app.

Your pitch should include:

- **Why:** The problem your product/ app is trying to solve
- **Who:** A description of who your product/ app is for
- **What:** An overview of the product/ app or a demonstration of the prototype
- **How:** Details about user experience and user interface, including the design, features and improvements you've made

What feedback did you receive about your product/ app idea?



## Prepare a test for your prototype

Another way to test your prototype is to develop a test for users to try out. Prepare a plan for a user to test out your prototype.

Describe the activity you want your tester to accomplish with your prototype. Think about what you'd like feedback on and tested.

Write a script that you'll read to your testers to introduce the task and product/ app. Try using a part of your product/ app pitch to help write this script.

How many people will you test with?

How will you reach out to people so that you can test with a diverse group?



# Evaluate

App Pitch

Prepare

**Observation**

Interview

## Observation of someone using my product/ app

Use your evaluation plan from the Prepare slide to test your prototype. Describe a goal you want them to achieve, then watch them try to accomplish the task. Ask them questions and record their answers.

Did the user know what button to tap?

Did the user know how to use the interface?

Was the user ever confused? At what point?

Did the user enjoy the product/ app?

Did the user smile or laugh at specific points?

Did you observe anything else?



## Evaluate

App Pitch

Prepare

Observation

Interview

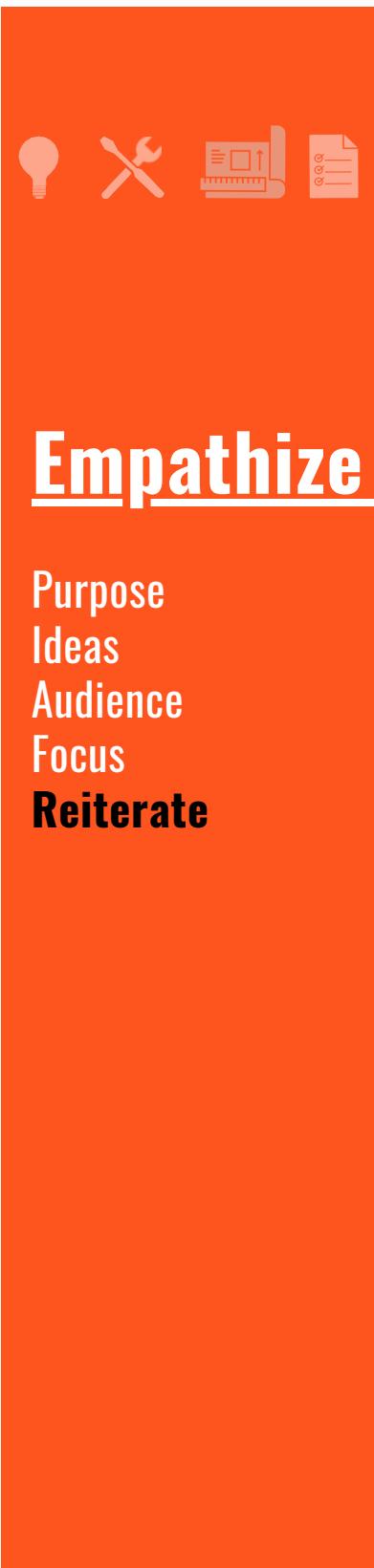
### Interview

Interview the user when they finish testing your product/ app to better understand their experience. Here are a few questions to get you started:

What did you like and not like about the product/ app?

Is the product/ app useful? Would you use an product/ app like this?

What else might you want to see in this product/ app?



## Reiterate

Remember, this is a design cycle and it's time to go back to the brainstorming stage. As you repeat the design cycle, think about what you learned from your evaluation. Did problems come up, and if so, how can you fix them? How can you improve your product/ app? Another important question to ask yourself is whether you're still excited about your product/ app idea. If not, it might be time to go back to your list. Not all ideas pan out. One objective of the design cycle is to help you test concepts and determine what's worth pursuing. Do you still want to continue with your idea? If so, write the name of your product/ app below, give it a star rating and write an product/ app review.



Review of my product/ app



### Go Further

Revisit the criteria you noted in the Purpose topic for what makes an product/ app great, then answer the questions to the right.

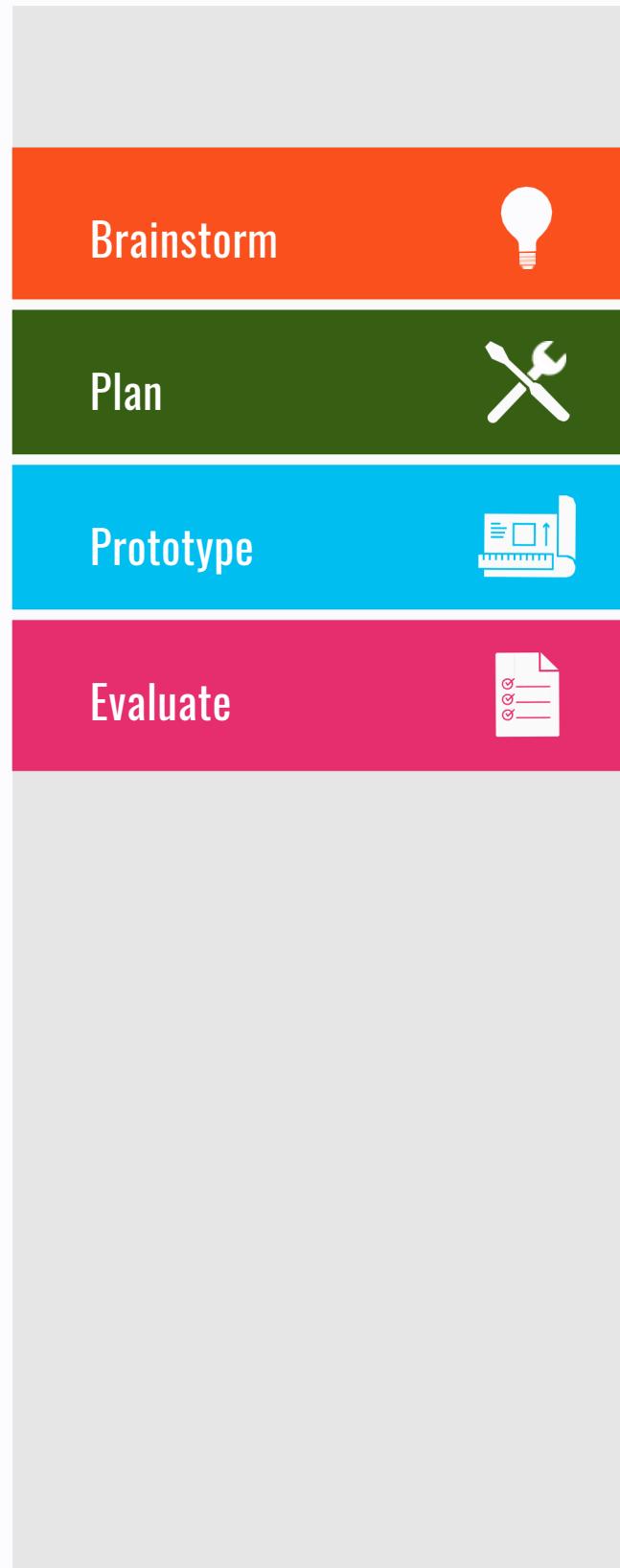
Continue to revisit the different topics throughout the design cycle. Revise your prototype accordingly, testing and retesting until you have the next great product/ app.

Is your product/ app innovative?

Does it do something that existing product/ apps don't do?

Is it a product/ app someone would use over and over again?

How can you improve your product/ app?



## Reiterate using feedback

Now it's time to reflect on your product/ app. Ask yourself what's exciting about your product/ app idea. If nothing comes to mind, try returning to your list on the [Ideas](#) slide. Not all ideas work out.

If you decide to continue with your original product/ app idea, think about what you learned from your evaluation. What did your product/ app do well? What could you improve?

Think about what you'll do next. Do you want to iterate on and improve the feature you designed? Are you ready to design the next feature of your product/ app? Or do you want to do both?

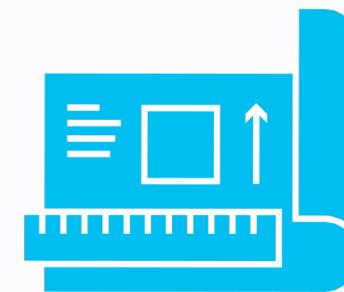
Revisit the parts of the design cycle that will help you make changes to your product/ app. Copy and paste new slides to use as you design the next user action and incorporate feedback.

# App Pitch

You've tested and improved your product/ app idea. Now it's time to polish it up and share it! Make a three-minute presentation or video of your pitch. A good pitch will tell a strong and clear story that makes people want your product/ app.

Your pitch should include:

- Why: The problem your product/ app is trying to solve
- Who: A description of who your product/ app is for
- What: An overview of the product/ app
- How: Details about the UX and UI, including:
  - The design
  - The features
  - The coding concepts it uses
  - The prototype and any visuals
  - Improvements made based on user testing





**Brand the impact with story in LinkedIn/U Tube followed by preparing a Case Booklet-** It is a comprehensive document that outlines the rationale, planning, and execution details. It serves as a reference guide and a strategic tool throughout the development process. A case booklet helps ensure that all aspects of the app development are thoroughly planned and documented, serving as a roadmap for the project and a reference for stakeholders.

**Update your Resume, GitHub, LinkedIn etc. with a Demo Video followed by Case Booklet**

- ✓ **Resume**
- ✓ **GitHub**
- ✓ **LinkedIn**
- ✓ **Demo Video**
- ✓ **Case Booklet**

# ACKNOWLEDGEMENT



## SNS Design Thinking Playbook

The SNS Design Thinking Playbook is a comprehensive guide, meticulously developed with inspiration from two key resources: **the App Journal by Apple** and **the Design Thinking Educators Toolkit by IDEO**. These resources have been instrumental in shaping the structure, methodologies, and approach of this playbook, ensuring it meets the needs of modern developers, designers, and innovators. By combining the practical insights from **Apple's App Journal**—a resource known for its user-focused strategies in app development—and the human-centered principles from **IDEO's Design Thinking Educators Toolkit**, the playbook achieves a unique balance between technical expertise and empathetic design.

Together, these resources have helped create a playbook that is not just a guide but a transformative tool for tackling modern challenges, driving innovation, and building solutions that resonate with users.

### SNS Design Thinking Playbook



## Key Phases

The **SNS Design Thinking Playbook** built on the foundation of modern design methodologies, technological advancements, and the shared insights of countless industry professionals. This playbook emphasizes the need for **Continuous Iteration, Collaboration, and a User-Centered Approach**—principles that are critical in navigating today's fast-paced technological landscape. It underscores the importance of aligning technical expertise with a deep understanding of user needs, ensuring that applications are not only **functional but also intuitive, scalable, and impactful**.

The **SNS Design Thinking Playbook** also acknowledges the evolving nature of technology. With every iteration, new challenges emerge, and with them, new solutions. This book serves as a **dynamic resource**, intended to grow with its readers as they encounter these challenges and innovate further.

With its focus on practical application and fostering innovative thinking, this playbook is positioned to drive the future of **app/product development** forward.

Credits to



## Evaluation Rubrics

Team Name: \_\_\_\_\_



Category	Needs Improvement (1 Point)	Meets Expectation (3 points)	Exceeds Expectation (5 points)	Total Points
<b>Problem Identification: Unicorns, YC, Gen AI</b>	Problem is vague, lacks relevance to Unicorns, YC, or Gen AI	Problem is somewhat clear, with moderate relevance to Unicorns, YC, and Gen AI	Problem is clearly defined, with high relevance to Unicorns, YC, and innovative use of Gen AI	
<b>User Empathy</b>	Limited or no understanding of user pain points, needs, or emotional drivers	Demonstrates an understanding of user needs and addresses them effectively in solutions and communication	Profound understanding and integration of user empathy, fostering trust and delivering exceptional value	
<b>Cloning: FSD, LCNC, Team Management</b>	Limited application or understanding of full-stack development, low-code/no-code platforms, and team management	Adequate use of full-stack development, LCNC platforms, and team management with moderate effectiveness	Mastery in full-stack development, innovative use of LCNC platforms, and exceptional team management skills	
<b>Customer Sales Pitch</b>	Lacks clarity or engagement	Clear and moderately engaging	Highly persuasive, engaging, and impactful pitch	
<b>BMC Analysis</b>	Incomplete or unclear components	All components addressed adequately	Comprehensive, innovative, and insightful analysis	
<b>Pitch: Mentors, Industry, Alumni, SNS 15</b>	Inadequate preparation or delivery during engagements with mentors, industry, alumni, or SNS 15	Moderately prepared and effectively delivers a clear pitch to stakeholders	Exceptionally prepared and delivers a compelling, highly engaging pitch, building strong stakeholder connections	
<b>Brand Impact: CGC Stories, Casebooklet, Profile Updates</b>	Limited efforts in leveraging CGC, creating casebooklets, or updating profiles	Uses CGC, creates casebooklets, and updates profiles to a satisfactory level	Strategically elevates impact through exceptional CGC stories, detailed casebooklets, and outstanding profile updates	
<b>Pitch Content/ Delivery</b>	Shares basic information, such as purpose and target audience	Gives clear explanation of the app's purpose and design, and how it addresses user needs	Presenting clear and compelling explanation of the problem they're trying to solve, market demand, audience and how the app was designed to meet user needs	
<b>Comments</b>				Total Score

## INDIAN UNICORN STARTUPS



## 7+7 INNOVATION STACK

### 7 Innovation Technologies

- |                                     |  |                                    |                                |   |  |                                  |
|-------------------------------------|--|------------------------------------|--------------------------------|---|--|----------------------------------|
| <b>1</b><br>Robotics and Automation | <b>2</b><br>AR / VR / Metaverse Gaming and Digital Twins | <b>3</b><br>Data Science / AI / ML | <b>4</b><br>Internet of Things | <b>5</b><br>Communication and Growth Tech | <b>6</b><br>Additive Manufacturing (3D Printing) | <b>7</b><br>Low Code Development |
|-------------------------------------|--|------------------------------------|--------------------------------|---|--|----------------------------------|

### 7 Innovation Industry Verticals

- |  |                         |   |                                   |                        |  |                            |
|--|-------------------------|---|-----------------------------------|------------------------|--|----------------------------|
| <b>1</b><br>Smart City / Manufacturing | <b>2</b><br>Health Care | <b>3</b><br>Agriculture and Food Technology | <b>4</b><br>Aerospace and Defence | <b>5</b><br>Automobile | <b>6</b><br>Retail (FMCG), Real Estate, Entertainment & Finance (BFIS) | <b>7</b><br>Power / Energy |
|--|-------------------------|---|-----------------------------------|------------------------|--|----------------------------|