

Designing Mobile Apps

User Experience Design Virtual Camp for High School Students
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YoUthXDdesign

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Get Started

We'll go through the design process to come up with a mobile app that people will love!

- ❑ Do some **user research** to find out what they want
- ❑ Create concepts and prototypes with **interaction design**
- ❑ Make your app's **visual design** appealing and engaging
- ❑ Get your designs ready for coding

Supplies List

Must Have

- ❑ [Google](#) Account
- ❑ Drawing pad or paper
- ❑ Pens or pencils

Nice To Have

- ❑ Sticky notes
- ❑ Color markers or pencils
- ❑ [Figma](#) account
- or*
- ❑ Smartphone with [POP \(Prototyping on Paper\)](#) mobile app

Activities

1 Find An Opportunity

- 1.1 Discovery
- 1.2 Problem Statement Definition

2 Find An App Idea

- 2.1 Individual Ideation
- 2.2 Group Brainstorming
- 2.3 Ideas Prioritization

3 Sketch Your Idea

- 3.1 User Flow Diagramming
- 3.2 Wireframing

4 Test Your Design

- 4.1 Usability Testing
- 4.2 Iterative Design

5 Polish Your Design

- 5.1 High-Fidelity Mockups

6 Get Ready To Code

- 6.1 Design Deliverables

Activity 1 - Find An Opportunity

Let's find a **problem to solve** that affects a group of people or **personas**. Is there a problem that you want to solve?

Here are some examples:

Theme: Homework

Persona: Student

Theme: Bullying

Personas: Target, Bystanders

Activity 1.1 - Discovery

Let's write down the **pain points** or problems for our **theme**.

Theme: **Homework**

Persona: **Student**

Homework
takes too long
to do

I can't have
fun after
school and still
do my
homework

I have to
stay up late
to get
projects done

My parents
take away my
games so I
can finish
homework

Theme: _____ Persona: _____

One sticky note per pain point

Activity 1.2 - Problem Statement Definition

We'll group similar pain points together, identify what the group cares about most, and write a **problem statement**. Identify the personas affected and what the main issue is about. Here's an example:

Students need help managing their time so they can have fun and still be able to do homework after school.

Sticky notes of common pain points

Problem statement: _____

Activity 2 - Find An App Idea

We'll **ideate** individually, group similar ideas, and build on each other's ideas. Ground rules:

1. Think of lots of different ideas
2. Stay focused on the problem statement
3. Draw ideas when possible
4. Stop at the time limit

Activity 2.1 - Individual Ideation

Let's write down our ideas on our own first.

Example problem statement:

Students need help managing their time so they can have fun and still be able to do homework after school.

Automatic reminders for when to stop playing games

Timers for down time and homework

Useful tips every day to stop procrastinating

Recommend a repeating schedule to follow

Problem Statement: _____

One sticky note per idea

Activity 2.2 - Group Brainstorming

Let's build off of each other's ideas.

Automatic reminders for when to stop playing games

...and turn off the game if you don't stop

Timers for down time and homework

...and other types of activities

Useful tips every day to stop procrastinating

...and time management skill building

Recommend a repeating schedule to follow

...and customize when it's needed

**Add to each other's ideas and
group stickies with similar ideas**

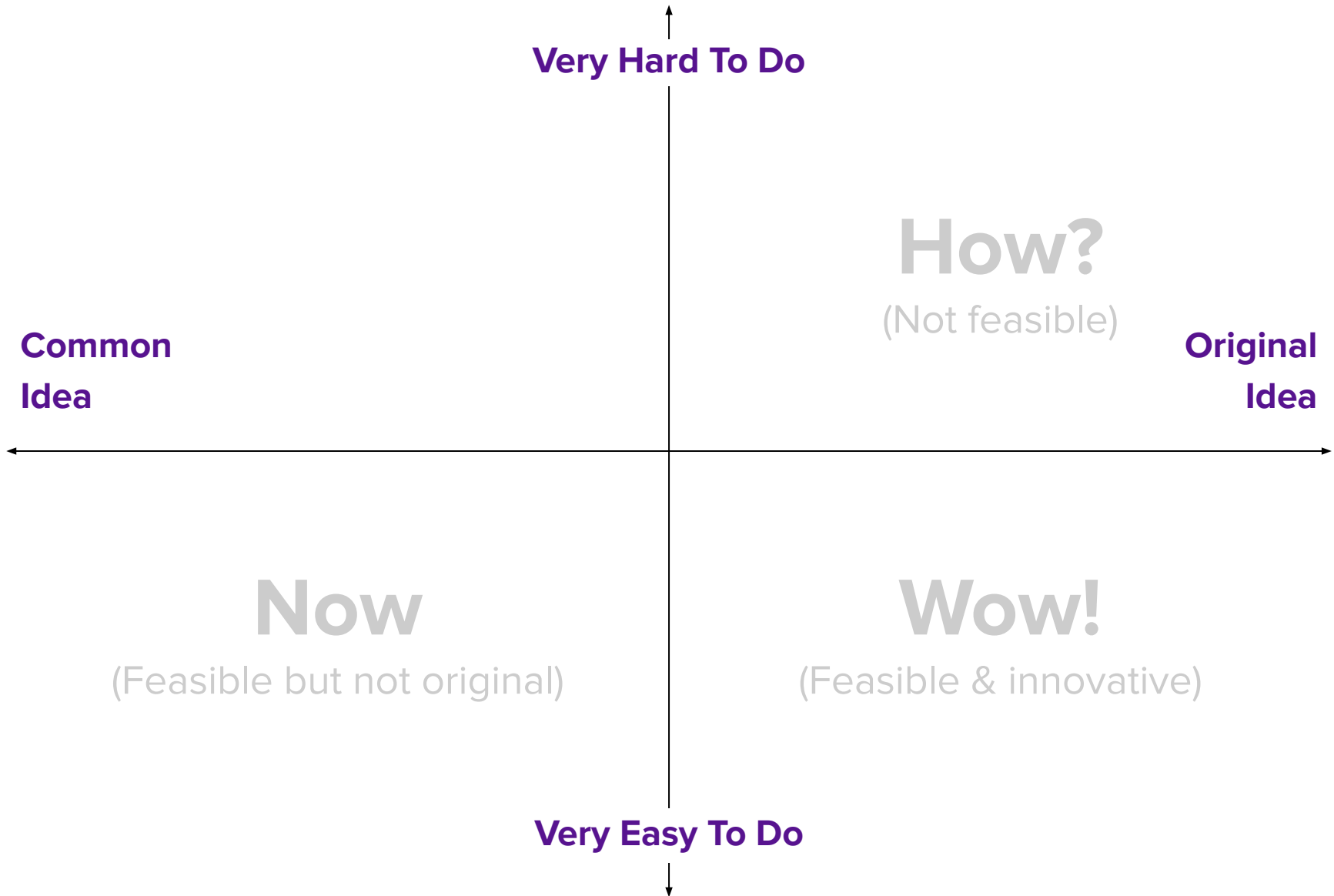
Activity 2.3 - Ideas Prioritization

Let's narrow it down to a few original and feasible ideas.



Now Wow How Matrix © Teo Yu Siang and Interaction Design Foundation

Now Wow How Matrix © Teo Yu Siang and Interaction Design Foundation



Activity 3 - Sketch Your Designs

Sketch the main **feature** or idea by thinking through the **user flow** or how people will be taken through your app.

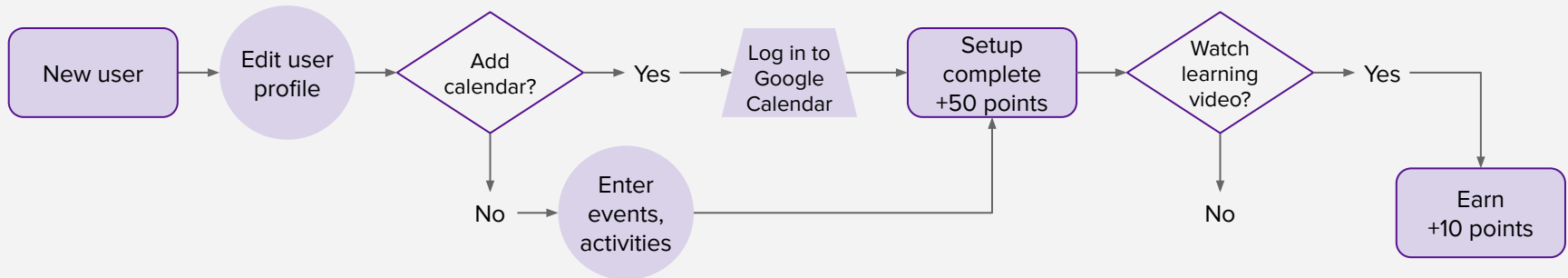
1. What is the first thing they have to do?
2. What are the steps after that?
3. What is needed before each step?
4. What happens if something goes wrong?

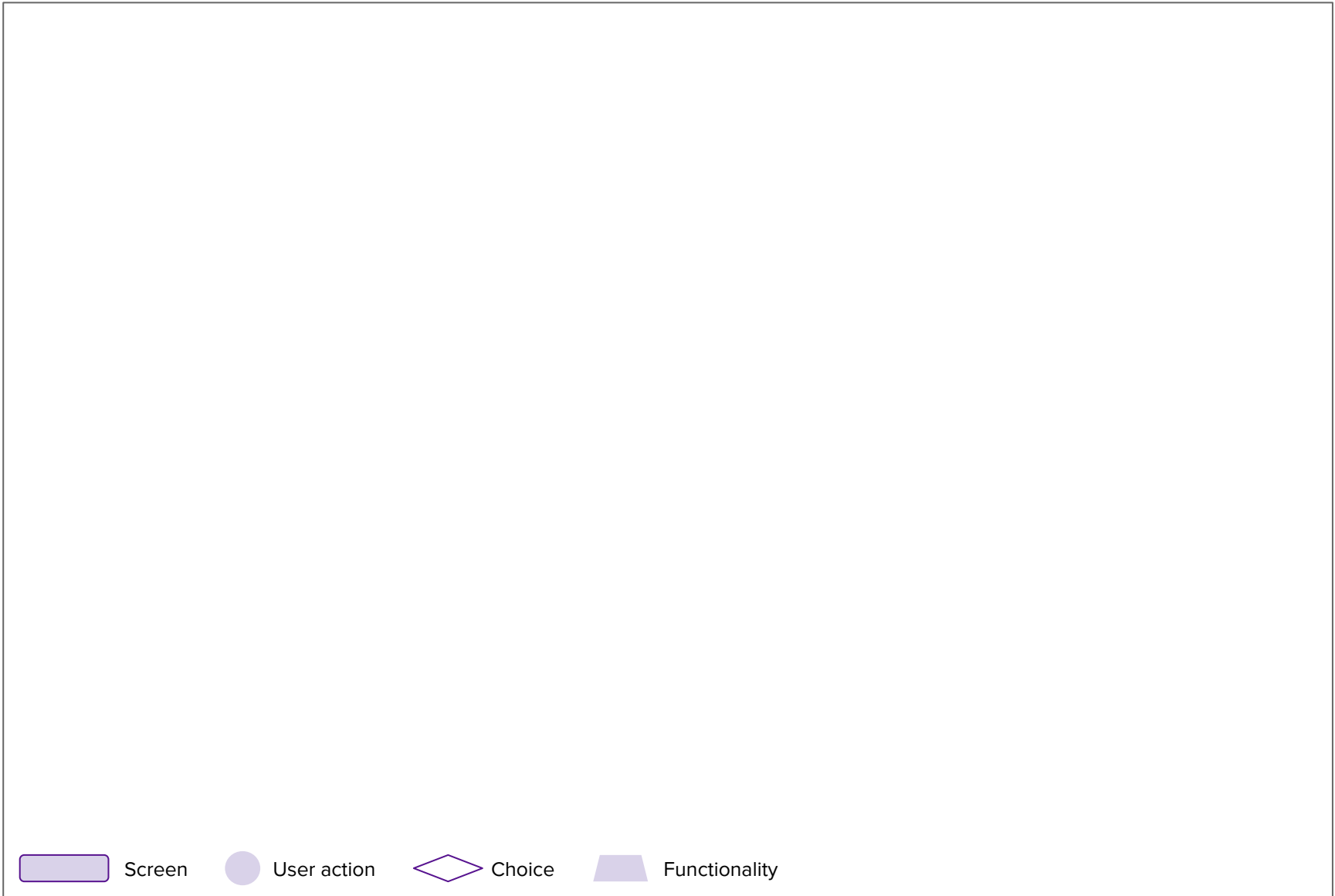
Activity 3.1 - User Flow Diagramming

Sketch a **diagram** of how your app idea will work.

Idea:

A game that teaches you about time management





Screen



User action



Choice

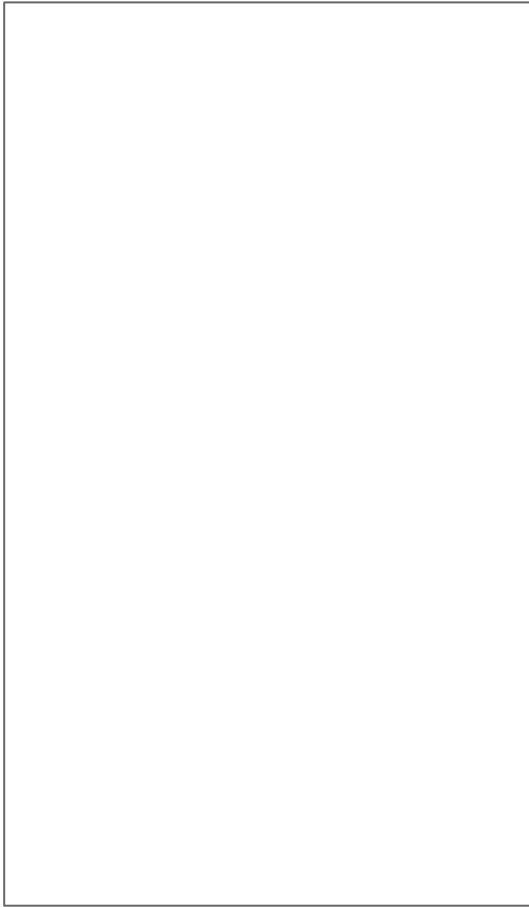


Functionality

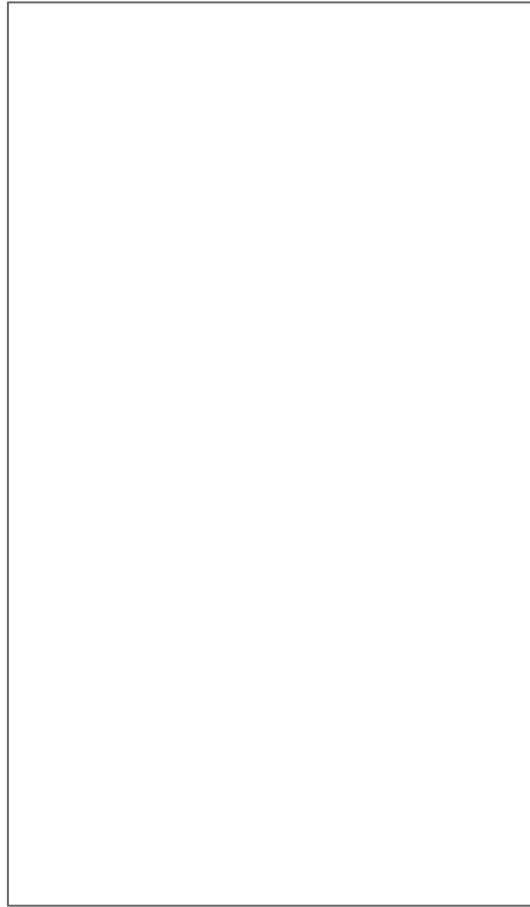
Activity 3.2 - Wireframing

Sketch the **UI** (user interface) or **screens** based on your user flows that shows what happens at each step

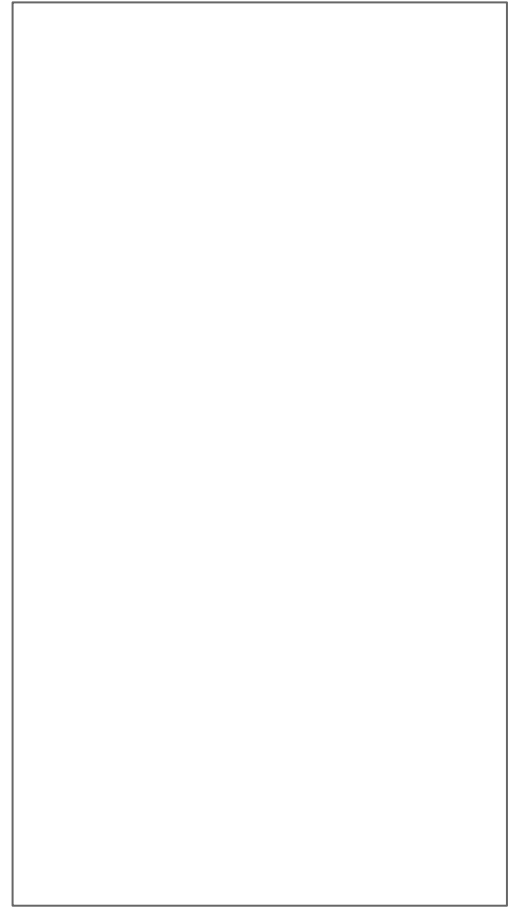




Screen: _____



Screen: _____



Screen: _____

Activity 4 - Test Your Design

Cut out your UI screens to make a **paper prototype** or use the [POP mobile app](#) to build a **digital prototype**.



Activity 4.1 - Usability Testing

Interview **participants** by asking them to use the prototype and give you **feedback** so you can understand your users.

1. **Don't** tell them what it's supposed to do!
If they ask, respond with “What do you think?”
2. Let them talk out loud as they use it
3. Take good notes
4. Ask them to rate the overall experience at the end

Activity 4.3 - Iterative Design

Take what you learned from testing and improve or **iterate** your designs. When making changes, consider who the feedback is coming from and how many others feel the same way.

You can always make a design better so just keep moving forward. Get your design to a point that is **satisfactory** enough to build something that people can start using.

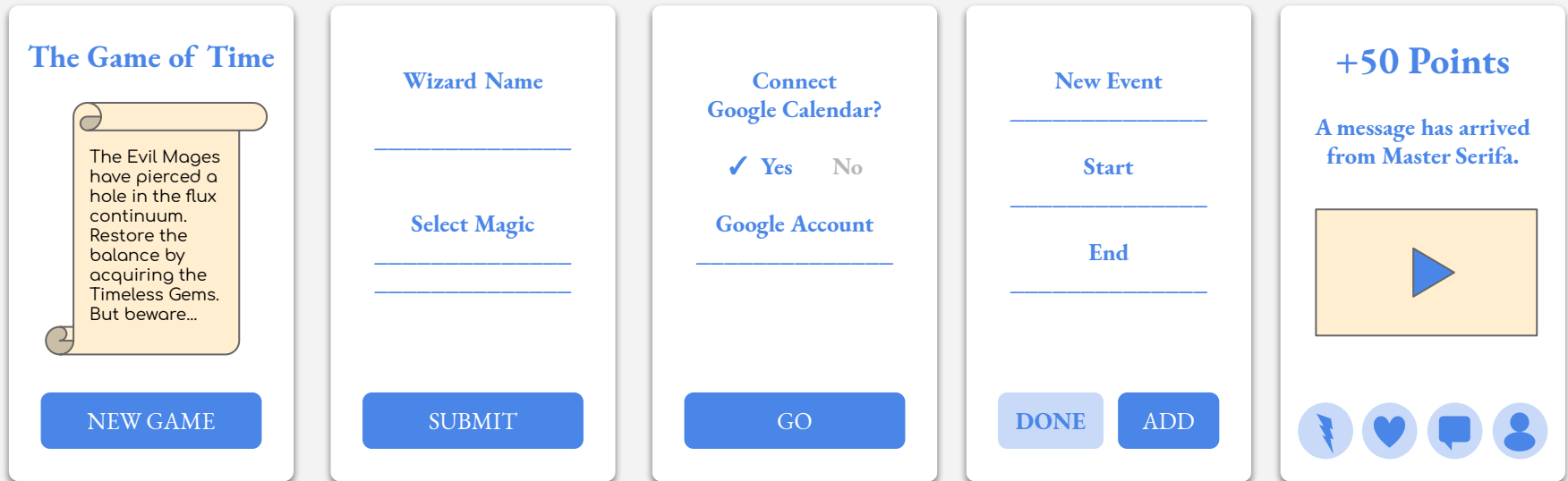
Activity 5 - Polish Your Design

Refine the UI screens so that it's even **easier to use**.

1. Interactive elements look like you can do something with it, like tap or scroll it
2. Text is easy to read and buttons are big enough
3. The layout, styles, and colors make logical sense and are pleasing to look at

Activity 5.1 - High-Fidelity Mockups

Create your final designs with **better UI detail.**



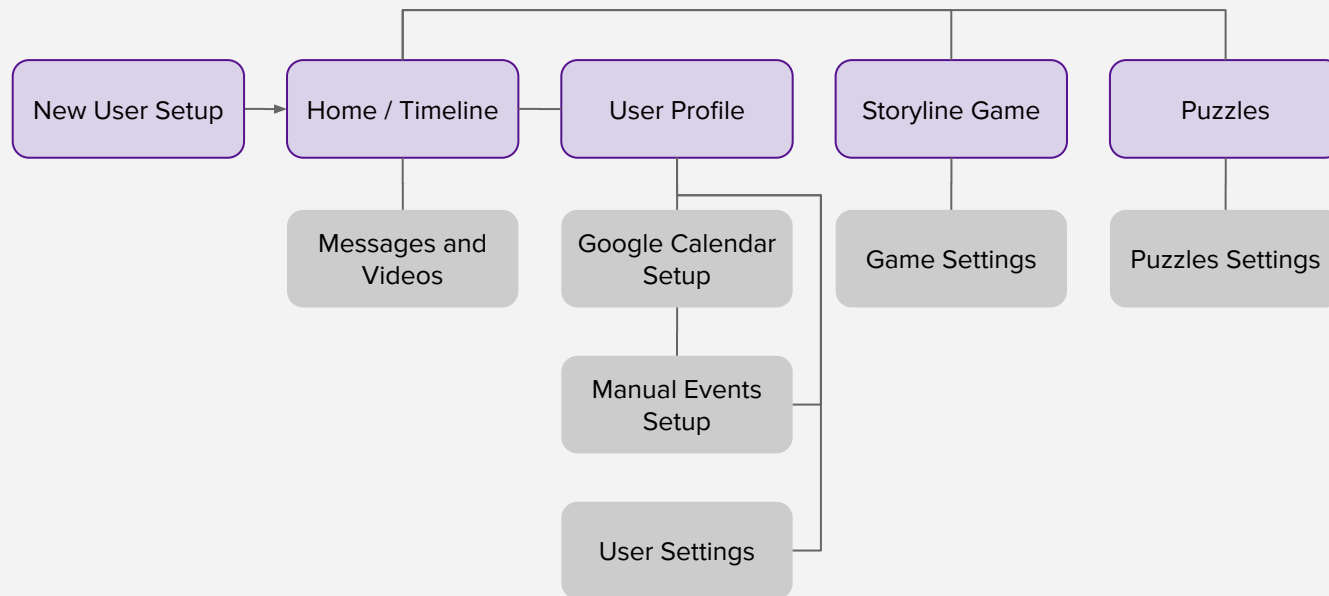
Activity 6 - Get Ready To Code

Last steps before programming! What are the **screens** to be built? Which **functionalities** are needed?

1. List of unique screens
2. Map of how the screens relate to each other
3. List of software functionality to make the app work, like maps, camera, or third-party apps

Activity 6.1 - Design Deliverables

Build a **sitemap** of how the app will be structured along with your prototypes and related documents.



App Sitemap

App Name

Checklist

- Prototypes
- User flows
- Mockups
- App sitemap
- Functionality

Functionality

Good work 👍

You did it!

Free Design Resources

[Drawkit](#) - icons, illustrations

[FigmaCrush](#) - Figma UI kits

[Flaticon](#) - icons

[FreeDesignResources](#) - Figma UI kits

[FreePhotos](#) - photos

[Freepik](#) - icons, illustrations, photos

[Giphy](#) - gifs, [gif converter](#)

[Mixkit](#) - music, videos

[NounProject](#) - icons

[Pexels](#) - photos, videos

[Pixabay](#) - icons, illustrations, music, photos, videos

[Stocksnap](#) - photos

[Undraw](#) - illustrations

[Unsplash](#) - photos

brainstorming - to generate ideas or solve problems through discussion

empathy - our ability to better understand people and their feelings or emotions

feature - a distinctive attribute or set of functionality

functionality - the range of operations that can be run on a computer or device

ideation or **ideate** - to come up with ideas on your own or with a group of people

information architecture - how pages are organized in a sitemap and is used as a blueprint during development

interaction design - how we use ideas to create a wide variety of solutions and find what works

iterative design - a method that's based on continuous prototyping, testing, analyzing, and refining a product

pain point - a specific problem that users experience

persona or **user persona** - a representation of a group of people who have similar needs

prioritization matrix - a tool that helps you make decisions on how to solve a problem

prototype - a model, example, or representation of a product or mobile app

research participant - a target user for a product or someone who represents a persona who has been asked to give their opinions on a prototype or topic

sitemap - the list of screens of an app or website and how they're organized

user experience - how people feel about their experiences with an app, product, or service

user experience design - the process of planning and creating the intended user experience

user flow - the defined path that a user takes on an app to complete a task

user interface - the space where interactions between humans and computers happen

user research - how we learn about people and problems so we can find the best solutions

visual design - how we make the user interface (UI) easier to use and look very good

wireframe or **wireframing** - to create a blueprint that represents the framework of an app