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The All In One CheatSheet

This is my knowledge...

JavaScript

- Configuring of absolute imports i.e using `@/components/my-component` instead of `../../../../components/my-component`.
- If a function (closure) survives *beyond its original context* and it holds onto large or unnecessary data — you have the potential for a memory leak.
- Use margin for external spacing (space outside an element). Use padding for internal spacing (space inside an element, between its content and its border.)

React

- `children` prop is the most basic and easiest way to optimize your components.

- Pass `...props` to custom components to inherit properties, to avoid redeclaring them.
- If you don't like Tailwind CSS's default sizes, just modify them in the config or inline... I promise, it isn't a taboo.
- For a FlatList with a header, use the `ListHeaderComponent` prop.
- If you ever wanna deploy on GitHub Pages and you're using Vite React + React Router, just save yourself the headache and [follow this guide to the letter](#). And DO NOT FORGET to clear cache and data of the website after build, trust me!
- If you're using a custom `base` in `vite.config.js` (like `/portfolio/`), **all paths to public assets must include that base.**

```
 //Wrong
 //Right
```

-

React Native

- [React Native Starter Guide](#)
- [React Native Starter Pack](#) to create an Expo app.
- For authentication structure, [react-navigation docs explained it well](#).
- To add cursor selection position:
 - In `<TextInput />`, use `onSelectionChange` prop to get the clicked position:


```
selection={selectionPosition}
onSelectionChange={(event) => event.nativeEvent.selection}
```
 - Then use a state to keep track, then set the cursor to the current position using the `selection` prop in `<TextInput />`

- Use the `SafeAreaView` component on the screens you register with a React Navigation navigator.
- Use `useSafeAreaInsets` hook from `react-native-safe-area-context` instead of `SafeAreaView` component
 - For setting up [themes](#)
 - To persist in a current screen when developing, [this could come in handy](#).
 - JavaScript performance is slower in dev mode due to extra checks, so always test in release builds for accurate performance.
- Use `TouchableWithoutFeedback` to wrap the entire screen to dismiss the keyboard when tapping outside the `TextInput` by calling `Keyboard.dismiss()`.
- If you need faster local storage than `AsyncStorage`, choose `MMKV`—it's 30x faster, though it's synchronous.
- Use `hairlineWidth` instead of 1px borders to achieve a cleaner, more native look, but double-check for unexpected gaps in layout.
- Use `<Modal>` with `presentation="pageSheet"` to have a native-feeling iOS modal with swipe-to-dismiss functionality, but note it may require a custom fallback for Android compatibility.
- If `react-native-bottom-sheet` isn't providing a desired native feel, consider checking out [react-native-true-sheet](#).
- Using simple animations like `FadeIn` and `FadeOut` for transitions from [react-native-reanimated](#) can make the app feel more native.

```
// If you want something to move around smoothly
<Animated.View layout={LinearTransition} />

If you want something to appear and disappear smoothly
<Animated.View entering={FadeIn} exiting={FadeOut} />
```

- Use a slight scale-on-press animation for buttons (use a custom `<Pressable />` to give a native squishy feel for interactions:

```

const DEFAULT_TARGET_SCALE = 0.98;
const AnimatedPressable = Animated.createAnimatedComponent(Pressable);

function SquishyButton() {
  const scale = useSharedValue(1); // Initial scale value
  const animatedStyle = useAnimatedStyle(() => ({
    transform: [{ scale: scale.value }], // Animated scaling
  }));

  return (
    <AnimatedPressable
      accessibilityRole="button"
      onPressIn={() => {
        cancelAnimation(scale); // Cancel any ongoing animation
        scale.value = withTiming(DEFAULT_TARGET_SCALE, { duration: 100 }); // Animate to target scale
      }}
      onPressOut={() => {
        cancelAnimation(scale);
        scale.value = withTiming(1, { duration: 100 }); // Animate back to original scale
      }}
    >
      <Text>Press Me!</Text> {/* Render children */}
    </AnimatedPressable>
  );
}

```

- For native navigation, use [Native Stack Navigator](#) in React Navigation or [Stack in Expo Router](#).
- Avoid custom headers for better native interactions, like back-button history, smooth transitions, and dynamic backdrops.
- For all out native bottom tabs look, try [react-native-bottom-tabs](#) library. It works with [Expo](#) and [React Navigation](#).
- Ensure all interactive elements are at least 44x44 pixels by using the [hitSlop prop](#) to increase the touch area without altering the layout.
- Remove [console.log](#) statements before bundling to prevent slowing the JavaScript thread; use [babel-plugin-transform-remove-console](#) in the [.babelrc](#) to automatically eliminate them in production.
- Wrap all list items in a ScrollView for a native feel (i.e the smooth dragging animation at the top or bottom end).

- To modify the default header's height, use **Header** from **react-navigation/elements** and remember to realign header elements to default:

```

import { Header } from "@react-navigation/elements";
import { useSafeAreaInsets } from "react-native-safe-area-context";

export default function Layout() {
  const insets = useSafeAreaInsets();
  return (
    <Stack
      screenOptions={{
        header: ({ options }) => (
          <Header
            {...options}
            headerStyle={{{
              height: 200, // custom header height
            }}}
            headerLeftContainerStyle={{{
              justifyContent: "flex-start", // Align to the top
              paddingTop: insets.top + 8, // Adjust for status bar + 8
            }}}
            to match default look
            paddingLeft: 16, // Left padding; 16, matches default
            look
            )}
          />
        ),
      }}
    />
  );
}

```

- If you only need toasts on **Android**, you can use the [ToastAndroid API](#) provided by React Native.
- Use **.jsx** or **.tsx** for files containing React components (JSX) and **.js** or **.ts** for regular JavaScript or TypeScript files.
- Memoization isn't always helpful! **useCallback** and **useMemo** have a cost, so [only use them if you notice performance issues](#).
- Dev mode slows things down, so for accurate performance testing, turn off JS Dev Mode on Android and run Metro on iOS.
- Memory leaks usually happens when closures hold onto data your app no longer needs, especially if you store those closures in arrays or global references. To check leaks, open *React Native DevTools → Memory tab → Allocation instrumentation*, and start a recording session. Stop the recording and look out for blue bars (those

mean the objects are still stuck in memory). Ideally, you want to see gray bars—those mean the memory was successfully released. Functions (Closures) that look tiny but with a massive retained size are your culprits.

Expo

- To delay the app's startup until resources are ready, [check here](#).
- In expo router, [something must be rendered to the screen](#) while [loading the initial auth state](#).
- Instead of using fonts through assets you can opt in for getting the fonts straight from [expo-google-fonts](#)
- To start expo app without cache, run [npx expo start --clear](#)
- So apparently, there's [expo secure store](#) and [react native async storage](#), each can both used to store values locally on the device. When to use which:

Use react native async storage to store non-sensitive data, such as user preferences, user preferences, app state, or caching.

Use expo se`cure store to store sensitive data like passwords, tokens, or personal information

- Using [Expo Secure store](#) as the custom persistence manger for firebase auth ([untested](#))
- Expo vector icon supports [using the icon as a button](#). For instance:

```
<Ionicons.Button name={"people"} size={24} color="#ffffff">
  This is a button icon
</Ionicons.Button>
```

- Expo Router automatically adds [react-native-safe-area-context support](#).
- To preload/cache expo icons, expo google fonts or local fonts in the [useFonts](#) hook:

```
const [fontLoaded, fontError] = useFonts({
  BarlowSCRegular: require("RELATIVE_PATH_HERE"), // Load local fonts
  Inter_900Black, // Load fonts from expo-google-fonts
  ...Ionicons.font, // Load icon fonts from @expo/vector-icons
});
```

- In Expo Router, keep only the initial screens in the ([tabs](#)) folder. Move any nested stacks outside to avoid issues with [hiding the tab bar](#) and [routing between stacks in different tabs](#).
- For keyboard handling, check out this thorough [guide](#).
- To prevent bottom tabs from moving above the keyboard on Android, set [softwareKeyboardLayoutMode](#) to [pan](#) in [app config](#) or [tabBarHideOnKeyboard](#)
- Use [npx expo-doctor](#) in your project's root to diagnose and [fix common issues in your Expo app](#).
- For native module support, view app from user perspective, and a full development experience, switch from Expo Go to a [Development Build](#).
- To review and upgrade dependencies, run [npx expo install --check](#)
- To make the status bar match your app's background color, try setting [userInterfaceStyle](#) in the app config to [automatic](#), [light](#), or [dark](#)
- To configure [eslint for Expo](#), run [npx expo lint](#)
- To [switch tabs without performing any navigation](#), you should use a [TabTrigger](#)
- Use the [reset](#) prop on [TabTrigger](#) to control how a tab handles its state (options: [always](#), [onLongPress](#), or [never](#)); for example, setting [reset="always"](#) will return a tab with nested stacks to its index route when navigating.
- Run your Expo app locally in production mode using [npx expo start --no-dev --minify](#) to [catch production-specific errors](#).
- Use [npx expo install](#) instead of [npm install](#) to ensure [library compatibility](#) and [get warnings about issues](#).

- Use a `.env` file to define variables like `EXPO_PUBLIC_[NAME]=VALUE` & access them via `process.env`

```
// env
EXPO_PUBLIC_API_URL=https://staging.example.com

// jsx
const apiUrl = process.env.EXPO_PUBLIC_API_URL;
```

- You can use standard `.env` files like `.env`, `.env.local`, or `.env.production`, which load based on priority, and it's recommended to add `.env.local` files to `.gitignore`
- Never store sensitive keys in your app code or `AsyncStorage`; instead, use expo-secure-store or react-native-keychain, and always keep secrets server-side when possible.
- You can use Expo's Linking API to [open links in the default web browser](#), or the `expo-web-browser` library for in-app browsing.
- To [prebuild for one platform](#), run `npx expo prebuild --platform ios` or `--platform android`.
- To build and run native files, run `npx expo run:android` or `npx expo run:ios` - Expo will run `npx expo prebuild` first if native directories don't already exist.
- To [reset and rebuild native files](#), run `npx expo prebuild --clean`, followed by `npx expo run` (or `npx expo run:ios` or `npx expo run:android`).
- [Must we use Index file?](#) **Yes**. Using index file in folders is essential in Expo Router for defining main routes, as it treats folders as their respective routes.
- [Avoid editing native files](#) (`AndroidManifest.xml` or `Info.plist`) directly; use a config plugin instead since direct edits will be lost after running prebuild.
- Add `.expo`, `android`, and `ios` to your `.gitignore`, to [keep local Expo configurations and platform-specific files from committing between prebuilds](#).
- Use [Expo Atlas](#) to analyze and optimize the libraries in your project, affecting your JavaScript bundle size.

- Follow these steps to set up [Android Simulator](#) or [iOS Simulator](#).
- `navigate` no longer replaces screens—it pushes them ([Expo Router v4](#)). Use `dismissTo`, which dismisses screens until the target is reached or replaces the current screen if not found.
- Instead of using `<Stack.Screen>`, you can [configure a route's options inside the component](#) with `navigation.setOptions()`, like hiding the header dynamically.
- Set route options dynamically with `<Stack.Screen>`, or use `router.setParams()` to update things like the screen title while the app is running
- Stack navigator ignores pushing multiple instances of the same screen; to change this, use `getId()` in `<Stack.Screen>` to generate a unique ID for each push.
- To remove stack screens: `dismiss()` removes one screen, `dismiss(n)` removes multiple screens, `dismissTo('/route')` goes back to a specific screen (not in history, it pushes it), and `dismissAll` clears the stack back to the first screen.
- `initialRouteName` ensures a [specific screen loads first when a deep link is used](#), but it doesn't impact regular in-app navigation.
- Expo Router automatically generates a `/sitemap` for debugging, but in SDK 52 and later, you can remove it by adding `sitemap: false` to the expo-router config.
- To fix `Error: Attempted to navigate before mounting the Root Layout component. Ensure the Root Layout component is rendering a Slot, or other navigator on the first render.`, check [here](#)
- To fix missing back buttons on certain screens, add `unstable_settings` in your layout and set `initialRouteName` to ensure a proper starting route for navigation.
- Notifications may not always trigger the response listener when reopening a killed app. Use `useLastNotificationResponse` or `getLastNotificationResponseAsync` for reliability.
- To generate different config files in Expo, run `npx expo customize`

- For a built-in, secure UUID generator in Expo, use `Crypto.randomUUID()` from `expo-crypto` instead of installing an external package.
-

Prettier

- To format code with Prettier and sort Tailwind classes:

- *Install the packages:*

```
npm install -D prettier prettier-plugin-tailwindcss
```

- *Create a `.prettierrc` file, then add:*

```
{  
  "plugins": ["prettier-plugin-tailwindcss"]  
}
```

- *As a plus, to format all specific files (e.g `.js` and `.jsx` files) and reformat Tailwind classes in one go, run:*

```
npx prettier "**/*.{js,jsx}" --write
```

Chrome Extensions

- If you're coding with Chrome APIs, use the `chrome-types` package to get smart auto-completion — it updates itself whenever Chromium updates.
- Since service workers can't use `window.localStorage` or rely on global variables (because they shut down often), use `chrome.storage.local` instead to keep data safe across sessions.
- Event listeners must be statically registered in the global scope of your service worker, so avoid placing them inside async functions — this helps with restoring them after a reboot.

- Let users decide what data your extension can access by [using optional permissions when possible](#) — it's cleaner, safer, and more respectful.
- [With WebSockets](#), make sure your extension doesn't get suspended prematurely — use heartbeats.
- If using React + Vite, make sure to place the manifest.json file into the public folder, so building it is copied into the root folder (dist) automatically.
- Use this [Jonghakseo's chrome extension template](#) for fast building of any chrome extension needed or even to learn indepthly about chrome extensions

NativeWind

- ClassNames can be used in a [Flatlist component](#).
- By default NativeWind maps className->style, but it can handle the mapping of [complex components](#).
- To create a component with default styles

```
function MyComponent({ className }) {
  const defaultStyles = "text-black dark:text-white";
  return <Text className={`${defaultStyles} ${className}`}>;
}

<MyComponent className="font-bold" />;
```

- To handle components with multiple style props:

```
function MyComponent({ className, textClassName }) {
  return (
    <View className={className}>
      <Text className={textClassName}>Text Component</Text>
    </View>
  );
}
```

- To style a child element based on its parent's state, [mark the parent with the group class](#) and apply [group-* modifiers](#).
- [Don't use space-{n}](#) anymore, instead use [gap-*](#)

- [Divide Width](#) has temporarily been removed.
- Outline doesn't work in NativeWind
- Transitions and Animations are experimental features. Use with caution.
- NativeWind [remapProps](#) lets you map Tailwind classes to third-party component style props or override them for easier customization.

```
remapProps(Component, { "new-prop": "existing-prop" });
remapProps(Component, { prop: true });
```

- Use NativeWind [cssInterop](#) to tag components, allowing [className](#) strings to resolve into styles, ideal for custom or third-party components needing precise prop handling.

Firebase

- In Firestore, [addDoc\(\)](#) adds a new document with an auto-generated ID. [setDoc\(\)](#) creates or replaces a document with a specific ID (pass `{ merge: true }` to avoid overwriting document). [updateDoc\(\)](#) updates specific fields in an existing document (and only if the document exists).
- Currently, [Firebase does not support providers authentication](#) (e.g Google) using `signInWithPopup` / `signInWithRedirect` **for React Native**. Here is [another way to set it up](#).
- To reduce storage costs, [exclude long string fields](#) not used for querying (e.g., notes, comments) from indexing.
- In Firestore, [serverTimestamp\(\)](#) is preferred to ensure all records have a consistent timestamp.
- All [Firebase Auth Error Codes](#)
- In Firebase, [prefer initializeAuth\(\) over getAuth\(\)](#).
- When paginating query results in batches, always use [orderBy\(\)](#).
- To batch upload data to Firestore Database:

```

async function batchUploadToFirestore(dataArray, collectionName) {
  const batch = writeBatch(db);
  try {
    dataArray.forEach((dataItem) => {
      const docRef = doc(collection(db, collectionName));
      batch.set(docRef, { ...dataItem, id: docRef.id });
    });

    await batch.commit();
    console.log(`All data uploaded to Firestore collection: ${collectionName}`);
  } catch (error) {
    console.error(`Failed to upload data to Firestore collection: ${collectionName}`, error);
  }
}

/*
 * Note:
 * - This method is efficient for creating multiple documents with auto-generated IDs.
 * - If your dataItem already has a meaningful 'id', use:
 *   batch.set(doc(db, collectionName, dataItem.id), dataItem);
 */

```

- Firestore snapshots aren't local storage-friendly due to metadata and non-serializable objects. For accurate pagination and queries, store essential data like IDs from the snapshot and retrieve a fresh snapshot when needed.

```

const lastVisitedId = "lastDocumentId"; // save this ID locally
// When needed, retrieve a fresh reference
const lastVisitedDoc = await getDoc(doc(db, "collectionPath", lastVisitedId));
// Pass this fresh snapshot to startAfter()
const query = collection(db, "collectionPath")
  .orderBy("someField")
  .startAfter(lastVisitedDoc)
  .limit(batchSize);

```

-

Gorhom BottomSheet

- If the BottomSheet isn't rendering as expected, Ensure your app's root layout is wrapped with **BottomSheetModalProvider**.
- To render children or components in a BottomSheet, use the versions provided by BottomSheet - learned that one the hard way.
- If BottomSheet is adding extra snapPoints, disable dynamic sizing i.e **enableDynamicSizing={false}**.
- For better UX, keep BottomSheetModal's drag-to-close behavior, but disable it with **enablePanDownToClose={false}** if necessary.

React Native Gifted Charts

- To dynamically size the **BarChart** to its parent width, use the parent **onLayout** prop to get the width, store in a state, and pass it to **BarChart parentWidth**.
- To fit bars to the chart's width, use **adjustToWidth**; won't work if **barWidth** or **spacing** is set.
- To have a fully dynamic responsive chart, set **parentWidth** and enable **adjustToWidth**.
- To remove horizontal rules (lines) behind bars, enable the **hideRules** prop.
-

Commit Messages Guide

This was gotten from [Gitmoji.dev](https://gitmoji.dev)

- 🐛 [bug]: Fix a bug.
- ✨ [sparkles]: Introduce new features.
- 🚀 [rocket]: Deploy stuff.
- 💚 [recycle]: Refactor code.
- 🎨 [art]: Improve structure / format of the code.
- ⚡ [zap]: Improve performance.
- 📝 [memo]: Add or update documentation.
- 🚑 [ambulance]: Critical hotfix.
- 💡 [bulb]: Add or update comments in source code.
- 🚧 [construction]: Work in progress.
- 🤖 [technologist]: Improve developer experience.
- 🚶 [children_crossing]: Improve user experience / usability.

- [arrow_up]: Upgrade dependencies.
- [lipstick]: Add or update the UI and style files.
- [wheelchair]: Improve accessibility.
- [alien]: Update code due to external API changes.
- [truck]: Move or rename resources (e.g.: files, paths, routes).
- [heavy_plus_sign]: Add a dependency.
- [heavy_minus_sign]: Remove a dependency.
- [iphone]: Work on responsive design.
- [fire]: Remove code or files.
- [speech_balloon]: Add or update text and literals.
- [bento]: Add or update assets.
- [dizzy]: Add or update animations and transitions.
- [arrow_down]: Downgrade dependencies.
- [pencil2]: Fix typos.
- [see_no_evil]: Add or update a .gitignore file.
- [tada]: Begin a project.
- [wastebasket]: Deprecate code that needs to be cleaned up.
- [poop]: Write bad code that needs to be improved.

AI Prompts

- To explain and teach code concepts:

[Content to explain]

You are an expert tutor in [content field]. I'm a complete beginner with no prior knowledge of the content provided above. Explain the content above in a simple, descriptive, and detailed explanations covering every aspect, WITHOUT SKIPPING ANY PART, using simple language. Explain each piece in a way that connects the dots. Feel free to include extra context and examples to ensure a thorough deeper understanding.

- To clean, optimize and refactor code:

[INPUT CODE]

Deeply analyze the provided code step-by-step to Refactor and Refine. Specifically:

- Code Readability & Maintainability
 - Fixing any potential bugs, performance issues, or memory leaks.
 - Use/Swap any potential improvements that could make the code more efficient.
 - Descriptive naming and better styling practices.
- To review codebase:

[INPUT CODE]

Review the code above step by step in detail. Check for bugs, issues, mistakes, inefficiencies, or vulnerabilities. Provide a straight to the point review of issues in the code with fixes

- To generate commit messages:

Using these commit guide emojis: 🐛 (Fix a bug), ✨ (Introduce new features), 🚀 (Deploy stuff), 💚 (Refactor code), 🎨 (Improve structure / format of the code), ⚡ (Improve performance), 📝 (Add or update documentation), 🚨 (Critical hotfix), 🧑 (Improve developer experience), 🔖 (Upgrade dependencies), 🎯 (Add or update the UI and style files), 🚚 (Move or rename resources), + (Add a dependency), - (Remove a dependency), 🔥 (Remove code or files), 🎨 (Add or update assets), 🔩 (Downgrade dependencies), 🎊 (Fix typos), 🗑️ (Add or update a .gitignore file), 🎉 (Begin a project), 🗑️ (Deprecate code that needs to be cleaned up).

Here is a rough description of the code changes I did:

[Describe the changes made here]

Generate 5 different ways of a concise commit messages based on the provided code changes (single message covering all). Ensure the commit messages are short and readable at a glance. Follow best practices for writing commit messages. The output should be in the format: "**[Emoji] [Commit message]**"

- To generate Vector illustration:

Generate outline vector illustration with white background showing a group of people going through a breakup

- To summarize or shorten

"[Include content]"

Summarize the content above into a single, conversational sentence that highlights only the most essential information, keeping it as simple and short as possible for easy, at-a-glance understanding. Give 5 options.

- To create database structure for an app:

Create a [Firestore] data structure for my app. Here are the core features of the app so you'd use that to construct a full most optimal data structure for the app firestore database:

[- add app feature in list format]

- To generate better prompts:

[Input Prompt]

Act as a prompt engineer. Review the prompt above and optimize it to make it better for the real use. You can ask any questions before proceeding with optimizing the prompt. REMEMBER, THE PROMPT ABOVE IS NOT BEING USED NOW, YOU'RE TO OPTIMIZE IT ONLY.

- To generate top results:

[INSERT CONTENT]

Review the provided content and determine the most efficient, optimized, and recommended approach to achieve it. Ensure the solution aligns with real-world best practices.

- To generate app designs or UI/UX:

You are a professional UI/UX product designer with 20+ years of experience and expertise in building intuitive, user-friendly [VS Code Extensions].

[Insert app description].

Using your expertise, provide thoughtful recommendations for UX Flow, UI layout concepts, color schemes. Ensure the design is optimized for a native [mobile app] experience.

- To redesign an existing page

You're a professional product designer and developer with 20+ years of experience in [building saas that converts]. Above is [the ___ page for my saas]. Improve and redesign it + the uiux and everything i'm not seeing.

Remember, this is a very important page... it should make user [feel good to do it... it should make it feel like this would solve whatever pain they have on twitter... it should justify them paying \$9/month]

- To brainstorm ideas:

Hey! I'd like to brainstorm an idea together. It's about:

[What are we brainstorming about?]

I have some rough thoughts, but I'd love to build on them gradually with you:

| [Include rough thoughts or ideas] |

Let's keep it casual, short and engaging, like a back-and-forth conversation between friends. Can you start by sharing one idea or question related to the idea to kick things off? From there, we can bounce ideas off each other little by little, step by step.

Overall

- To create design blueprint/wireframes on a board, use [Milanote](#).
- For color theme generation, use [UI Colors](#) or [Realtime Colors](#) or [Color Mind](#) or better still ask AI (Copilot or Claude)
- For UI component libraries, use [Tamagui](#) or [gluestack \(formerly NativeBase\)](#).
- For toast notification, use [react-native-toast-message](#), [react-native-notifier](#), [react-native-toast](#), [react-native-root-toast](#) (expo-recommended)
- In Zustand, [when combining smaller stores into a single bounded store](#), use [create](#) only for the bounded store, not for each individual stores.

Note: When combining stores into one, make sure each store has **unique state property names**. If state properties overlap (e.g., both stores having [isLoading](#)), this can lead to serious side effects, as one state might overwrite the other unexpectedly.

- For free public APIs, check out [public-apis](#), [Public-APIs](#) or [RapidAPI](#).

UX Tips

- Follow the design guidelines for the specific platform (the [Human interface guideline](#) for Apple, and [Material design guideline](#) for Google)
- When brainstorming with AI regarding building an app, ask it to design each app screen from a ui ux expert pov.
- Place controls in the middle or bottom of the screen for easy reach, and enable swipe gestures for smoother navigation.
- [Use platform-specific features for only that platform](#) to make your app feel truly native. Don't mimic effects like iOS's liquid glass on other platforms. Instead, create components suited to each platform.

App Essentials Checklist

- Design wireframes and mockups for all screens.
- Integrate navigation (e.g., React Navigation, Expo router).
- Implement user authentication (Firebase or custom backend).
- Ensure form validation with instant feedback.
- Add loading spinners for sign-in, sign-out, and data fetching.
- Use skeleton loaders for placeholder content while images or videos load.
- Set keyboard management to auto-dismiss and avoid covering input fields.
- Check navigation flows to ensure smooth back-and-forth between screens.
- Implement smooth animations for screen transitions and interactions.
- Use lazy loading for images, videos, or heavy content to improve performance.
- Enable offline support for critical parts of the app.
- Add a splash screen for a polished startup experience.
- Add pull-to-refresh gestures for lists and content-heavy pages.
- Add toast messages for non-critical notifications.
- Add password visibility toggles for password fields.
- Test on multiple devices and screen sizes for compatibility.
- Support biometric authentication (Face ID, fingerprint).
- Ensure high contrast and readability for text, especially in dark and light modes.
- Design for one-handed usage by placing important actions near the bottom.
- Add sync indicators for reconnecting after being offline.
- Auto-logout feature after a session timeout for security.
- Implement auto-complete or suggestions to make forms easier to fill out.

- Setup color themes for light and dark modes if needed.

Developer Essentials Checklist

- Use ESLint and Prettier for code formatting and error prevention.
 - Use TypeScript to catch errors early during development.
 - Store secrets securely with environment variables or SecureStore.
 - Regularly cleanup dependencies not in use.
 - Clean up unnecessary console.log statements.
 - Use Git & regular commit codes.
 - Clean up resources like intervals or listeners to prevent memory leaks.
-