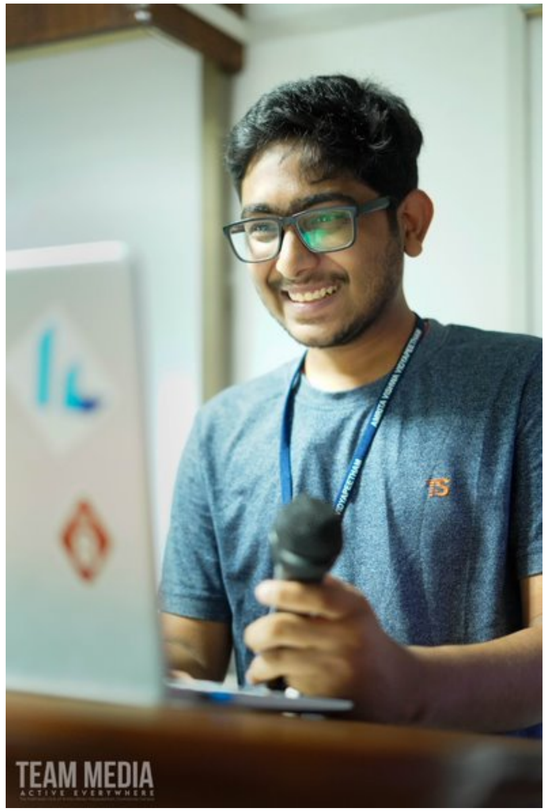
Hi!
I’m Nirmal.

Developer - design convert seeking to build better experiences for everyone.

I’m a computer science undergrad who’s found his calling in the craft of Human-Computer Interaction, with a focus on crafting next-generation, innovative, ergonomic and intuitive experiences for every user out there, no matter what the medium of interaction be. I aim for my work to help narrow the technological divide.



Socials:

Nirmal Karthikeyan

cyberwizard1001

Nirmal Karthikeyan

PROJECT 1

INTERFACE REIMAGINATION

Exploring alternate mobile interface schemes to retain the rich information density of current mobile devices while improving the ease of interaction.

BACKGROUND

- The shipment of large phones has grown by leaps and bounds.
- Advancements in technology are slowly breaking down boundaries between computing devices and have resulted in pocket powerhouses.

*Project on figma has been linked, click on title

THE SHORTCOMING

- While excellent for consumption of media, large phones present navigational challenges when compared to their smaller counterparts.
- One hand usage becomes difficult, the user cannot easily reach the diagonal corners of the screen.
- Applications often have important menus and options often positioned in the corners, reducing reachability.

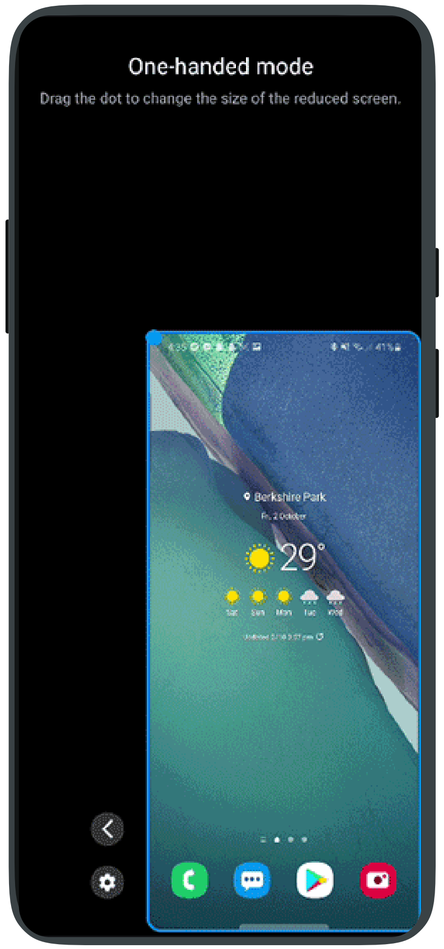
EXPLORING EXISTING SCHEMES

One-handed mode

Android phones offer a feature that simply shrinks down the available display size, defeating the purpose of buying a large screen phone. Stop gap solution at best. Proposed scheme will retain usage of the entire screen.

One Hand Operation +

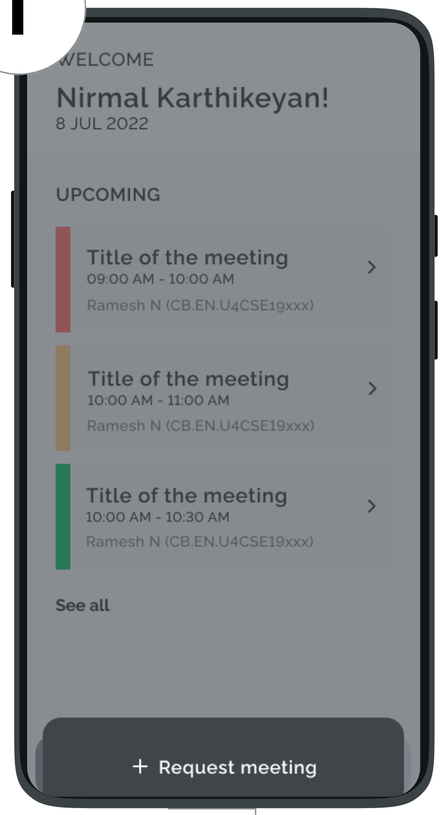
Samsung's premium phones permit the installation of this app which can be used to assign system wide swiping gestures. However, not context aware and doesn't eliminate the problem at hand.



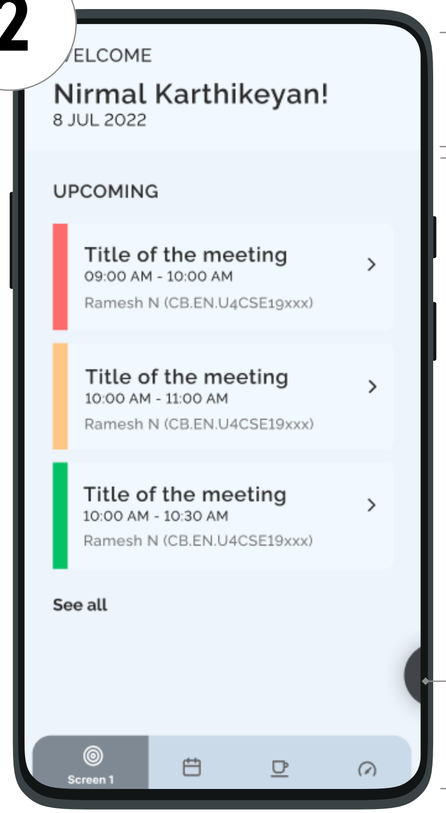
One handed mode, found on several Android phones.

SOLUTION

1



2



20%

80%

Request meeting option, usually found on the top right corner has been moved to the context aware menu

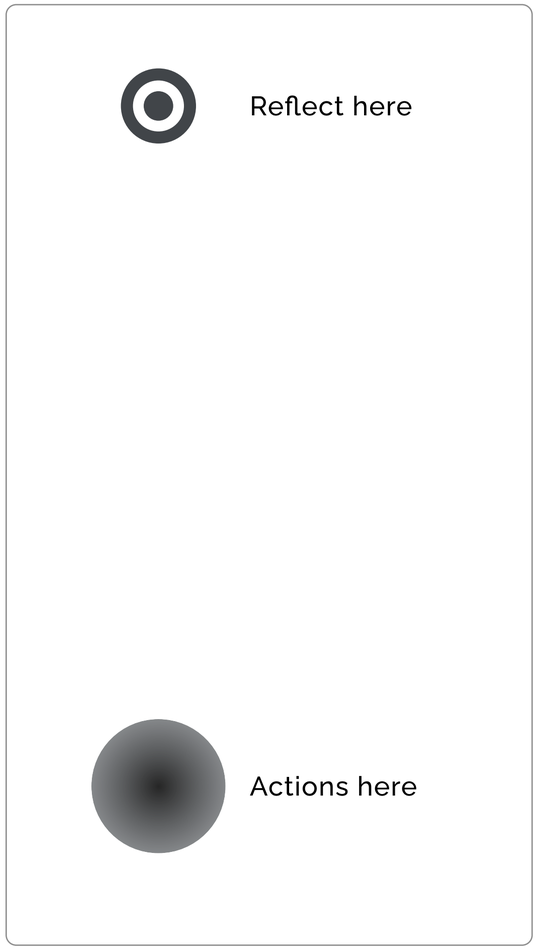
movable menu - flexibility

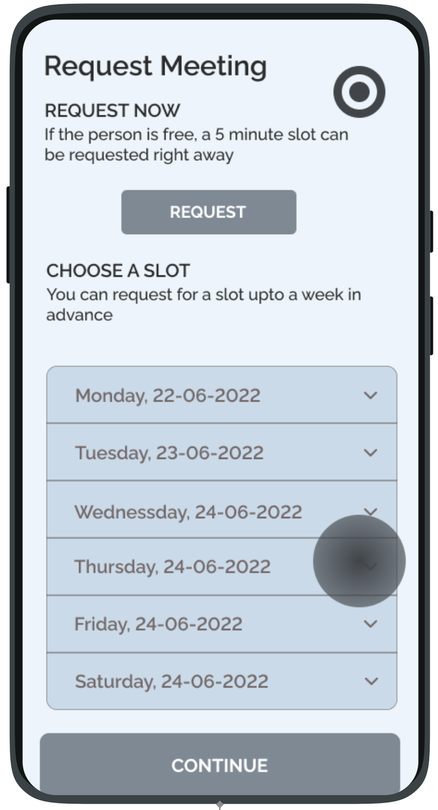
1 **Context aware menu** on all screens, positioned at the bottom for easier one hand navigation

- User's thumb will be at the bottom center of the phone when holding it - they can access the bottom without placing any strain on their digits.
- This format of interaction is beloved by millions of owners of handheld gaming devices like the Nintendo Game Boy

2 Interactive elements and controls **moved to bottom 80%** of screen.

SOLUTION





Cursor for navigation in legacy applications

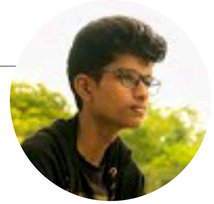
For legacy applications, includes a **pointer** that allows interactions in the bottom 50% of the screen to reflect in the top 50%.

REVIEWS

Replace with comments of this alone

Sumithra Sudhakar

Replace with comments of this alone



Gautham Krishna K

Other Projects:

A selective few from a long list of other design projects

Portfolio website: A showcase of my designing talents, I've designed my portfolio website to be minimalist, with interesting interactive elements. Considerable thought has been put into it and the site aims to give viewers a sense of who I am as a person, and my best works. It uses a duochromatic colorscheme. Under construction.

GIS Data Tool : A data collection application built with users who might not be comfortable with English based data entry in mind. It tries to eliminate data entry errors as much as possible through the extensive use of other modes of input, and uses autocorrect, translation and suggestive text support when necessary. Used in a State Department of Science and Technology project.

SupplyBlocks : A decentralized marketplace built on blockchain where anyone can sell local produce to the discerning customer. Finds a way for local irregular producers of goods to tap into the future, while offering excellent privacy, increased transparency in product sourcing, and most importantly, features a way for the seller/buyer to transact in cash instead of cryptocurrency, removing a key barrier in the adoption of Web3. Meant to promote local businesses. Designed and built for a hackathon. Work in progres.

Supply Chain Indicator : A radar graph based information tool that allows the consumer to choose from the range of available products based on the social issues that matter the most to them. Being designed and built for a hackathon conducted by IBM.